MD stereo system

Operating Instructions

Model No. **SC-PM65MD**

COMPACT disc DIGITAL AUDIO

Mini Disc

EB

Panasonic®

Note:
"EB" on the packaging indicates the United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

RQT5548-B

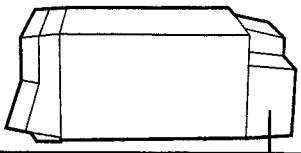
Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
These operating instructions are applicable to the following system.

System	SC-PM65MD
Main unit	SA-PM65MD
Speakers	SB-PM65

CD and MD sections

Right side of the product

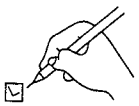


DANGER	INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.	(Inside of product)
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Indersiden at apparatet)
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen sisällä)
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.	(Apparatens insida)
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets innside)
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN	(Im Inneren des Gerätes)

CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

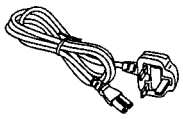
CAUTION!
DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING.

Supplied accessories

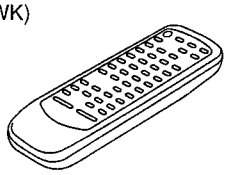


Please check and identify the supplied accessories.

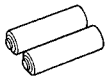
☐ **AC mains lead** ..... **1 pc.**
(VJA0733)



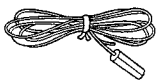
☐ **Remote control** ..... **1 pc.**
(RAK-SC970WK)



☐ **Remote control batteries** ..... **2 pcs.**

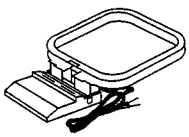


☐ **FM indoor antenna** ..... **1 pc.**
(RSA0007)



☐ **FM antenna plug adapter** ..... **1 pc.**
(SJP9009)

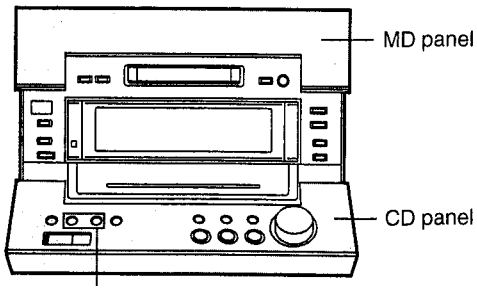
☐ **AM loop antenna** ..... **1 pc.**
(RSA0033)



Use numbers indicated in parentheses when asking for replacement parts.

Care when opening and closing the panels

The MD and CD panels open when one of the [PANEL OPEN/CLOSE] buttons is pressed.
Please observe the following when opening and closing the panels.
- Do not put your fingers near the panels when they are opening or closing.
- Do not try to stop the panels or push them open while they opening or closing. This can cause them to stop part way. (Press [PANEL OPEN/CLOSE] again to restore the panels to normal if this occurs.)



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Safety precautions

Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Place it at least 15 cm away from wall surfaces to avoid distortion and unwanted acoustical effects.

Do not place heavy items on the unit.

Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ⓚ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

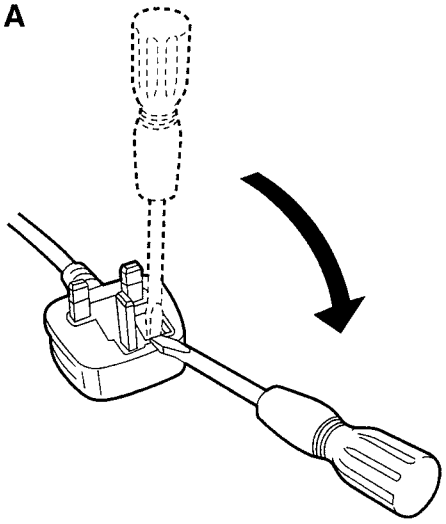
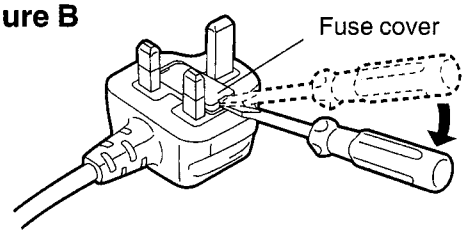


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

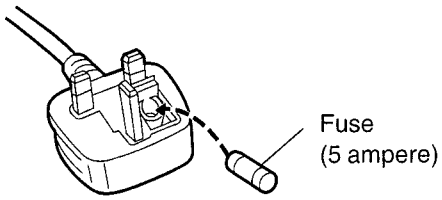
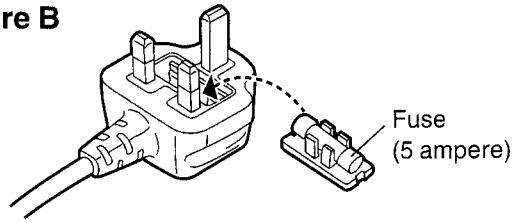


Figure B



Installation

Main unit

Do not place anything on top of the unit or block the heat vents in any way. Allow 15-cm clearance from the rear of the unit.

Front speakers

- Do not allow the speakers to touch the system.
- The left and right speakers are the same.

Use only the supplied speakers.

The combination of the main unit and the speakers provides the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

Note

These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.

Caution

- **Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.**
- **Do not attach these speakers to walls or ceilings.**

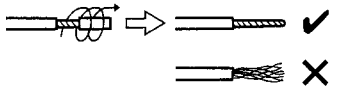
Note

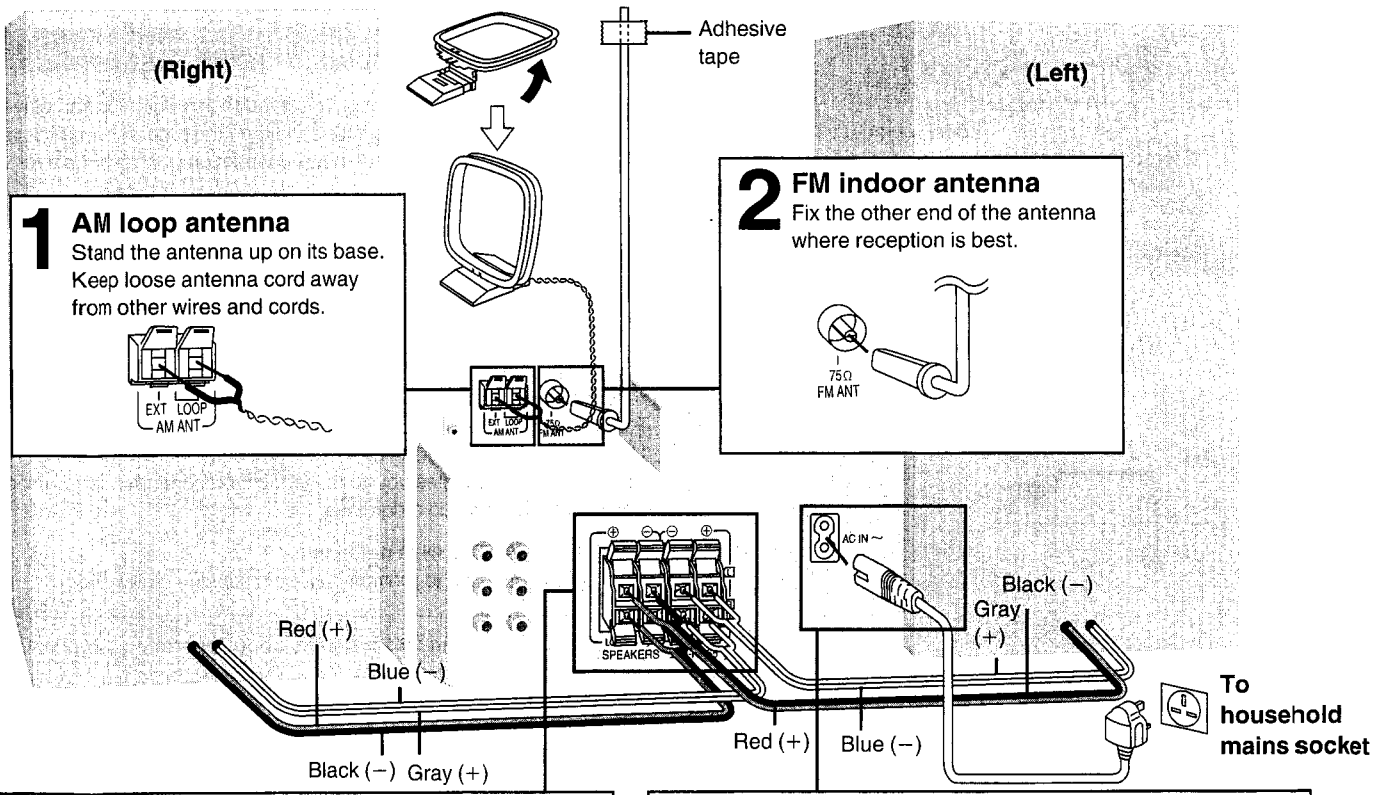
- The sound from the subwoofers comes from the rear of the speakers. Allow about 5 cm clearance from the rear of the speakers to adjust the bass.
- Bass sound is output best if the speakers are placed on a hard surface.

Basic connections

Before connection

- Do not connect the AC mains lead until all other connections are complete.
- To prepare the AM loop antenna, and speaker cords, twist the vinyl tip and pull off.



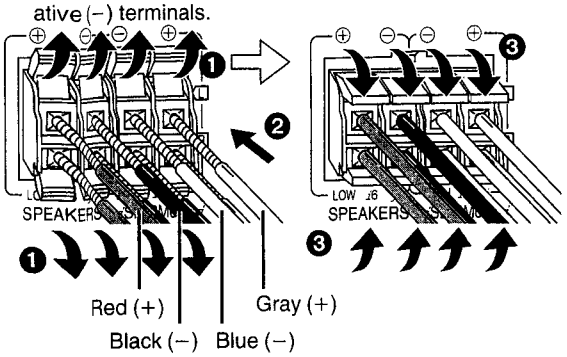


3 Speaker cords

Connect the cords to the terminals of the same color.

Note

- To prevent damage to circuitry, never short-circuit positive (+) and negative (−) speaker wires.
- Be sure to connect only positive (red or gray) wires to positive (+) terminals and negative (black or blue) wires to negative (−) terminals.

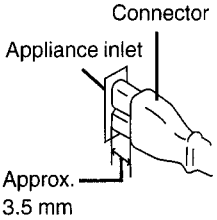


READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 4 BEFORE PROCEEDING TO STEP 4.

4 AC mains lead

Insertion of connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.
However there is no problem using the unit.



Note

The included AC mains lead is for use with this unit only. Do not use it with other equipment.

For your reference

Information you enter into the unit's memory, except for time, remains intact for up to one week after the mains lead is disconnected.

External unit connections

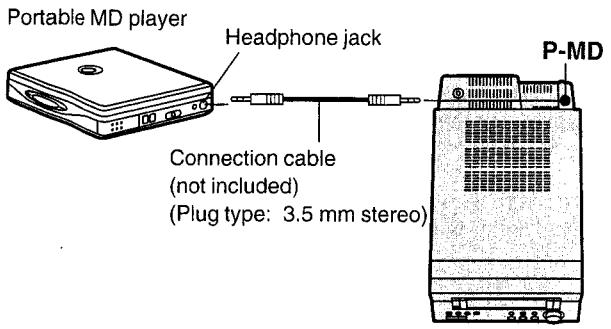
- Turn off all units before making connections.
- Refer to the manual of the other units for details. (Cables and equipment not included.)

Stereo phono cable (not included)
White (L)
Red (R)

A Connecting a portable MD player

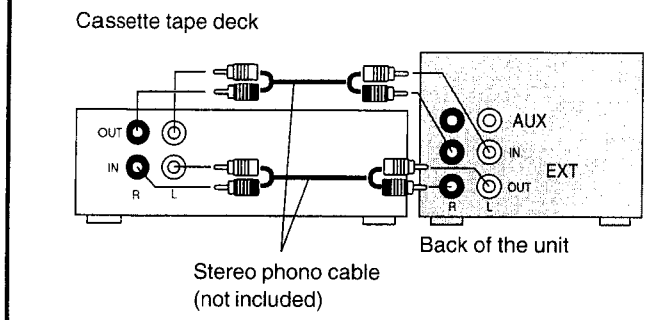
You can make analog recordings of sound from a portable MD player.
Connect the unit to the headphone jack of the portable MD player.

Note
Do not put the portable MD player on top of this unit when recording. This can cause noise.



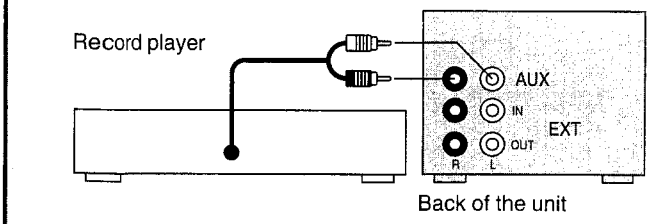
B Connecting a cassette tape deck

By connecting a cassette tape deck to "EXT IN", you can play audio from the cassette tape deck through this unit's speakers and record to the MD section.
Connection to "EXT OUT" enables you to record audio from this unit to the cassette tape deck.



C Connecting a record player or television

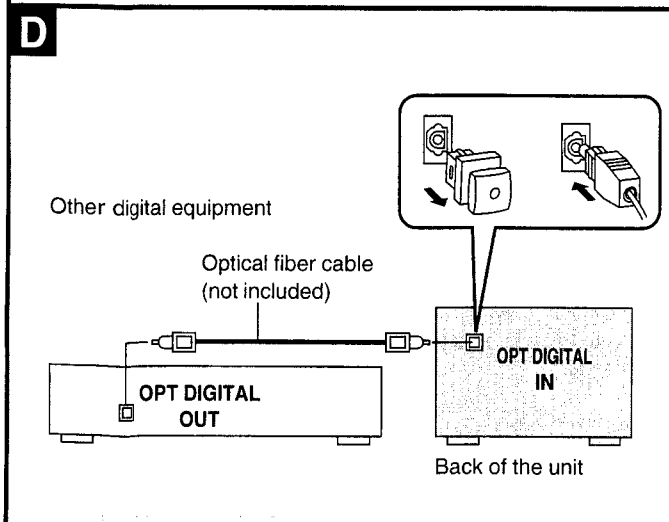
By connecting a record player or television to this unit, you can play audio from these units through this unit's speakers and record to the MD section.
The example in the illustration shows connection of a record player with a built-in phono equalizer.
When connecting a record player other than this type, consult your audio dealer.



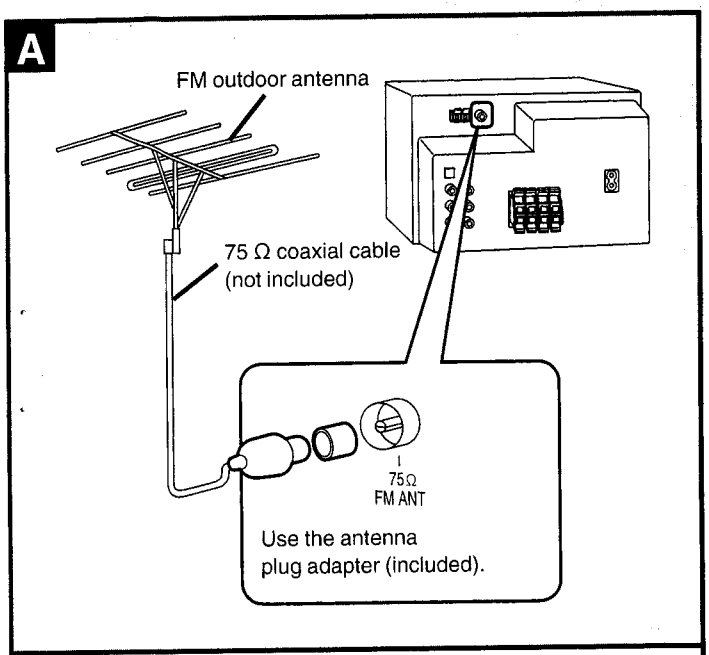
D Connecting digital equipment

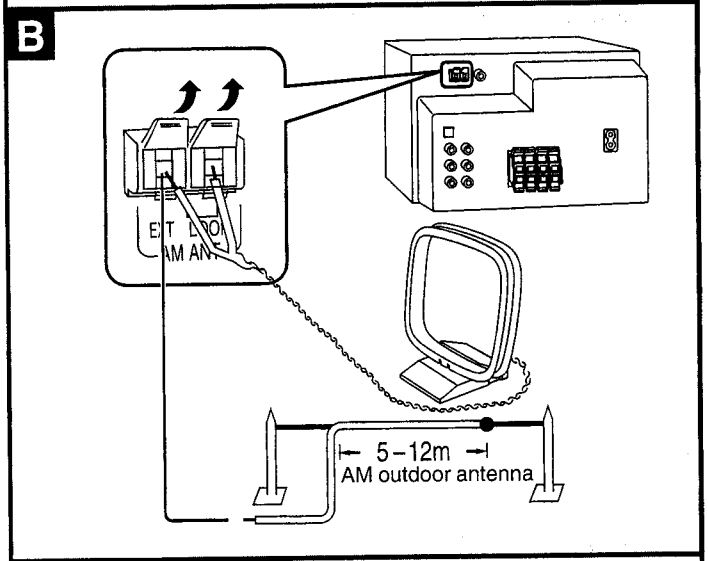
You can play audio from digital equipment through this unit's speakers and record to the MD section.
Remove the dust cap before use.
Use an optical fiber cable to connect digital equipment to OPT DIGITAL IN.
This connection enables you to make digital recordings. Use analog connection to make analog recordings.

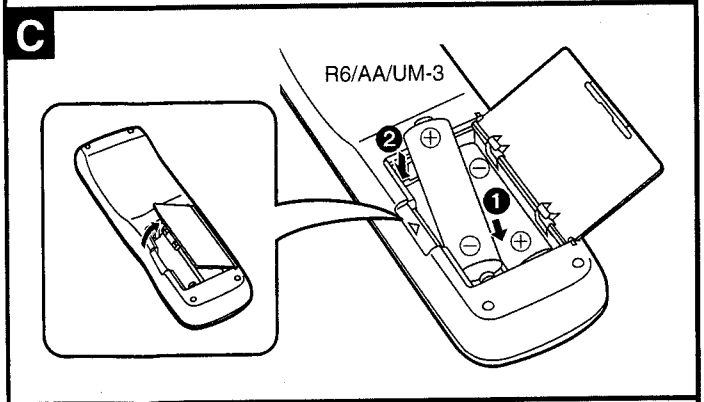
When OPT DIGITAL IN is not in use
Replace the dust cap to prevent dust from causing malfunction.

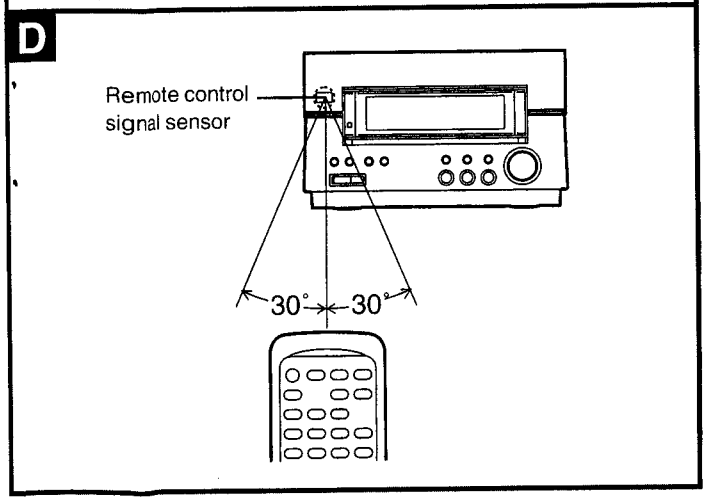


See pages 35 and 36 for details about operating other equipment.









Optional antenna connections

Use outdoor antennas if radio reception is poor.

A FM outdoor antenna

- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician.

B AM outdoor antenna

Run a piece of vinyl wire horizontally across a window or other convenient location.

Note

- Leave the loop antenna connected.
- Disconnect the antenna when the unit is not in use. Do not use the antenna during an electrical storm.

The remote control

C Batteries

- Insert so the poles (+ and −) match those in the remote control.
- Do not use rechargeable type batteries.

Do not;

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.
- keep together with metallic objects such as necklaces.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.
If electrolyte leaks from the batteries, consult your dealer.
Wash thoroughly with water if electrolyte comes in contact with any part of your body.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.
Replace if the unit does not respond to the remote control even when held close to the front panel.

If the battery lid comes loose, slide it back into place horizontally.

D Use

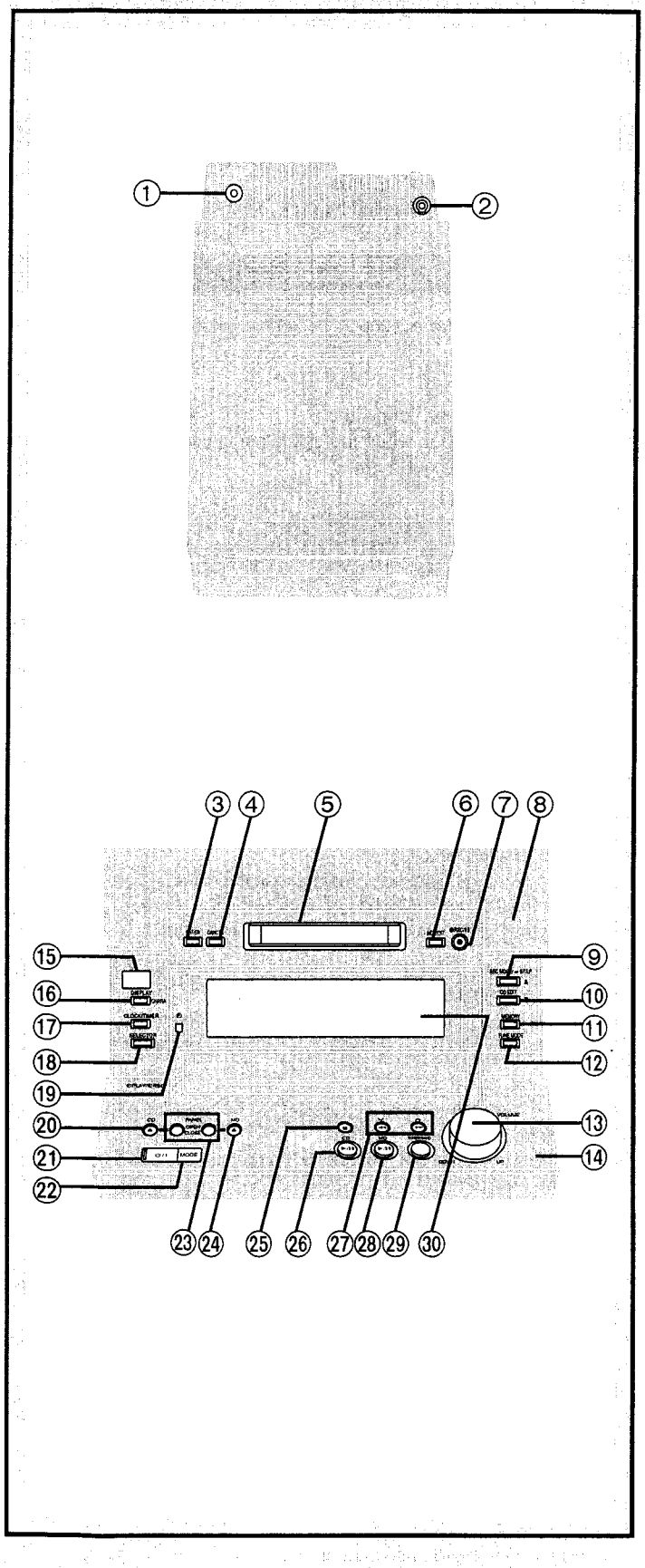
Aim at the sensor, avoiding obstacles, at a maximum range of 7 meters directly in front of the unit.

- Keep the transmission window and the unit's sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors on cabinets.

Do not;

- put heavy objects on the remote control.
- take the remote control apart.
- spill liquids onto the remote control.

Front panel controls



Main unit

① Headphone jack (PHONES) 31
② P-MD terminal (P-MD) 6
③ Enter button (ENTER) 23
④ MD edit cancel button (CANCEL) 23
⑤ MD slot
⑥ MD edit button (MD EDIT) 23
⑦ MD record/pause button (● REC/❚❚) 18
⑧ MD panel
⑨ MD recording mode select button (REC MODE/–SP/LP, ▲) 18, 21, 22
⑩ CD edit button (CD EDIT, ▼) 19, 20
⑪ Memory button (MEMORY) 17
⑫ Tuning mode select button (TUNE MODE) 16
⑬ Volume control (VOLUME) 12, 13
⑭ CD panel
⑮ Remote control signal sensor 7
⑯ Display/character select button (DISPLAY, CHARA) 16, 18, 26, 31
⑰ Clock/timer button (CLOCK/TIMER) 10, 32
⑱ Function select button (SELECTOR) 35, 36
⑲ Play/record timer button (◴, ◴PLAY/◴REC) 32
⑳ CD tray open/close button (⏏, CD) 13
㉑ Standby/on switch (⏻/I) 9
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
Standby/on indicator
When the unit is connected to the AC mains supply, this indicator lights red in standby mode and lights green when the unit is turned on.
㉒ Power saving mode button (MODE) 9
㉓ CD/MD panel open/close buttons (PANEL OPEN/CLOSE) 10, 12
㉔ MD eject button (⏏, MD) 12
㉕ Stop button (■) 12, 13
㉖ CD play/pause button (▶/❚❚, CD) 13
㉗ Disc skip/search, tune, time adjust buttons (⏮, ∨, ⏭, ∧) 10, 12, 13, 16
㉘ MD play/pause button (▶/❚❚, MD) 12
㉙ Tuner band button (TUNER/BAND) 16
㉚ Display

A Remote control

Buttons such as ㉑ function in the same way as the controls on the main unit.

㉛ Sleep timer button (SLEEP) 34
㉜ Auto power-off button (AUTO OFF) 10
㉝ Numbered buttons (0–9, ≥10) 14
㉞ Program cancel mode button (CANCEL) 15
㉟ Program button (PROGRAM) 15
㊱ Disc skip/search buttons (⏮/◀◀, ▶▶/⏭) 12, 13
㊲ Disc pause button (⏸) 12, 13
㊳ CD play button (▶, CD) 13
㊴ MD recording mode select button (REC MODE) 21, 22
㊵ Bass/treble control buttons (BASS −, +, TREBLE −, +) 30
㊶ Muting button (MUTING) 31
㊷ Display select button (DISPLAY) 10, 31
㊸ Dimmer button (DIMMER) 31
㊹ Repeat button (REPEAT) 14
㊺ Random button (RANDOM) 14
㊻ FM mode button (FM MODE) 16
㊼ MD play button (▶, MD) 12
㊽ MD record buttons (REC) 18
㊾ Sound virtualizer button (SOUND VIRTUALIZER) 30
㊿ Loudness button (LOUDNESS) 30

B Saving power in standby mode

Set the unit to reduce energy consumption in standby mode.

1 **Press [⏻/I] to turn the unit on.**

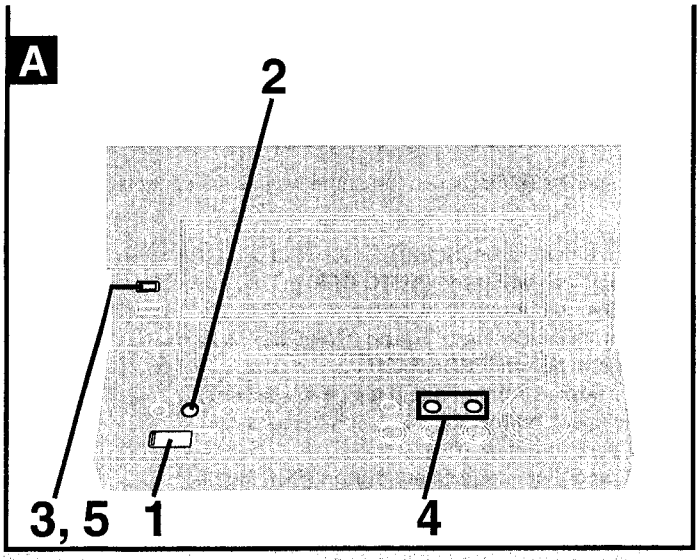
2 **Press [MODE].**
The current mode is displayed.

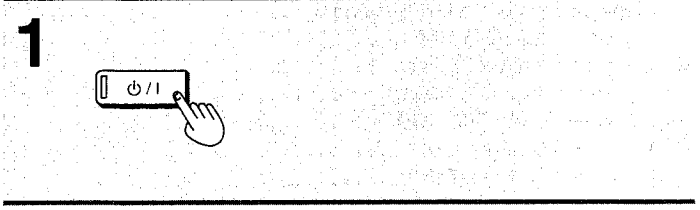
3 **Within 2 seconds**
Press [MODE] to select "ECO".
Each time you press the button:
NORMAL (off)⇄ECO (on)

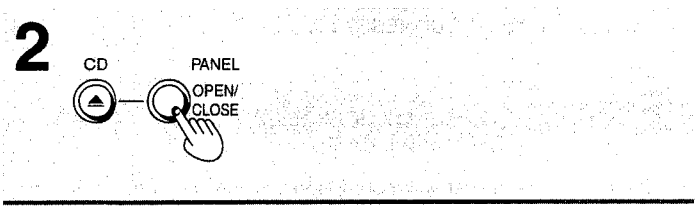
ECO: The clock is not displayed in standby mode.
Power consumption—Approx. 0.8 W
NORMAL: The clock is displayed in standby mode.
Power consumption—Approx. 8.5 W

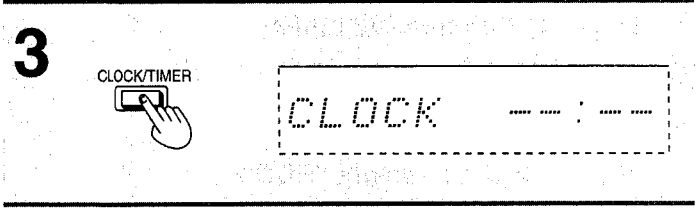
The standby/on indicator lights in both modes.

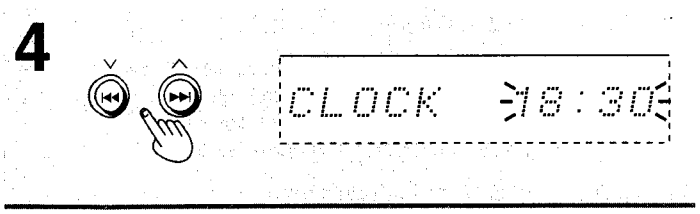
The mode can be switched to ECO when the unit is off but it can not be switched back to NORMAL.

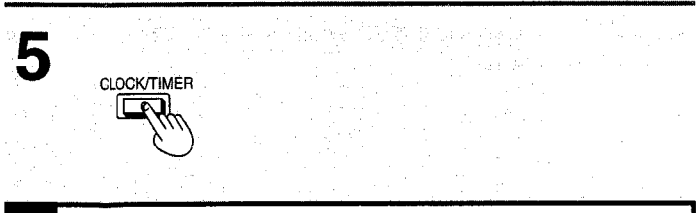


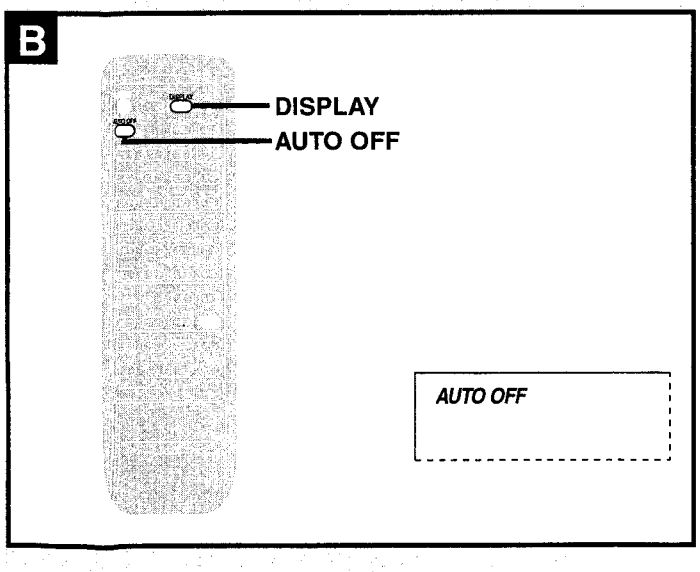












A Setting the time

This is a 24-hour clock.

The example shows how to set the clock for 18:30 (6:30 pm).

1 Press [⏻/I] to turn the unit on.

2 Press [CD, PANEL OPEN/CLOSE].
The CD panel opens.

Note
Do not put anything in front of the unit that can block the CD panel.

3 Press [CLOCK/TIMER] to display "CLOCK".
Each time you press the button:

CLOCK→⏲PLAY→⏲REC→Original display

4 Within 10 seconds
Press [⏮, ∨] or [⏭, ∧] to set the time.
Press and hold to change the time faster.

5 Press [CLOCK/TIMER].

The time is set and the original display is restored.

Displaying the clock

When the unit is ON:
Press [CLOCK/TIMER].
The clock is shown for about 10 seconds.

When the unit is OFF (Power saving mode is on):
Remote control only
B Press [DISPLAY].
The clock is shown for about 5 seconds.

B Auto power-off

Remote control only

When "MD" or "CD" is selected as the source
To save power, the unit turns off if it is left unused for 10 minutes.

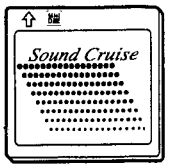
Press [AUTO OFF].
"AUTO OFF" is displayed.

To cancel
Press [AUTO OFF] again.

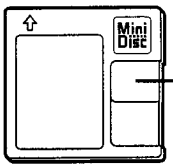
For your reference
- The setting is maintained even if the unit is turned off. When the unit is turned on again, the unit functions as described above.
- If you select any source other than "MD" or "CD", "AUTO OFF" goes out. It comes on again when you select "MD" or "CD".

Some useful information about MDs

Types of MDs



Prerecorded MDs
These discs are for playback only.



Recording MDs
Apart from the time limitations, it is possible to record up to 254 tracks on an MD.

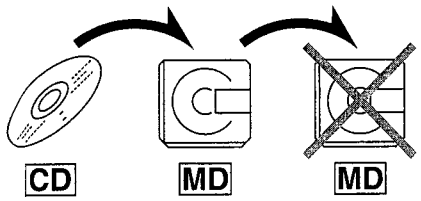
Recording on MDs

MDs are different to tapes

MDs give you control over how tracks are recorded and editing functions allow you to change the contents of an MD after recording.
Unlike cassettes, you do not need to find an empty space to start recording as all recordings start from the first available space. When the MD fills up, you can use the editing functions to erase unneeded tracks. You cannot record over tracks.

Limitations on digital recording

The serial copy management system (SCMS) prevents unlimited recording of digital material.
Clear, relatively intact, digital recordings can be made when recording a CD in this unit or from another digital unit connected by an optical fiber cable to an MD in this unit. So to protect the rights of the producer of the original material, it is not possible to make a further recording from that MD to another MD.
Analog recordings are unlimited by this system.

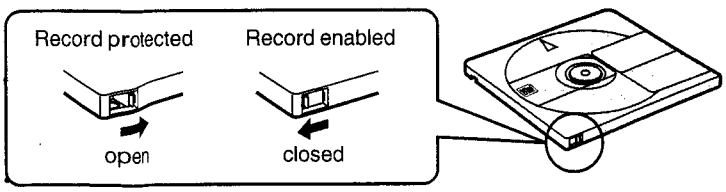


Stereo and monaural recording

This unit is capable of recording in stereo or monaural and can playback MDs recorded in stereo or monaural.
Monaural recording allows approximately twice the amount of material to be recorded and played back, but sound quality is affected.

Protecting your recordings

Move the switch to open the write protect hole. Close the hole when you want to record or edit the MD again.



Note when recording, editing, and titling

These operations are not complete until "UTOC Writing" and the "UTOC" indicator stop flashing on the display. Be careful not to interrupt the power supply otherwise these operations will not be completed and the disc itself can be damaged.

Glossary of terms

Analog
This is the method that records and cassettes use to handle sound signals. It is possible to make analog recordings with MDs.

Digital
This is the usual method used by MDs and CDs to carry and record sound signals. Digital recording can be of very high quality.

Editing
This refers to any post-recording changes made to the MD.

Marking
This is the act of adding track marks. It can be done automatically when recording, or it can be done manually during recording or after recording with the editing functions.

TOC
Table of contents. Information stored on the MD about the tracks and times.

Track marks
These marks separate tracks. There can be up 254 marks on one MD. They can be inserted automatically or manually during recording, and they can be added or removed with the editing functions after recording.

UTOC
User table of contents. This is information the user can edit, such as text and track positions.
The message "UTOC Writing" appears on the display after recording and editing.

Care and storage

Label MDs only as recommended. Extra labels and exposed adhesive can cause malfunctions.
Do not open the shutter, and close it immediately if it accidentally opens. Never touch the disc inside the MD cartridge.
Keep your MDs out of direct sunlight, humid and dusty places, and away from the direct heat of heating appliances.

MDs

1 Press [MD, PANEL OPEN/CLOSE].

The unit comes on automatically, and the MD panel opens.

Note

Do not put anything on top of the unit that can block the MD panel.

2 Insert the MD.

If "MD" is selected as the source, the message "TOC Reading" appears on the display, then information about the disc is shown; total number of tracks, total play time, and any text information on the disc. If "MD" is not selected as the source, you can see this information by pressing [▶/❚❚, MD] and then [■].

3 Press [▶/❚❚, MD] to start play.

When the track is recorded in SP mode
(Standard recording): "SP" lights.
When the track is recorded in LP mode
(Long play recording in monaural): "LP" lights.

4 Adjust the volume.

To stop the disc
Press [■].

To pause play
Press [▶/❚❚, MD]. Press [▶/❚❚, MD] again to resume play.

Skipping tracks
Press [⏮, ∨] (backward) or [⏭, ∧] (forward).

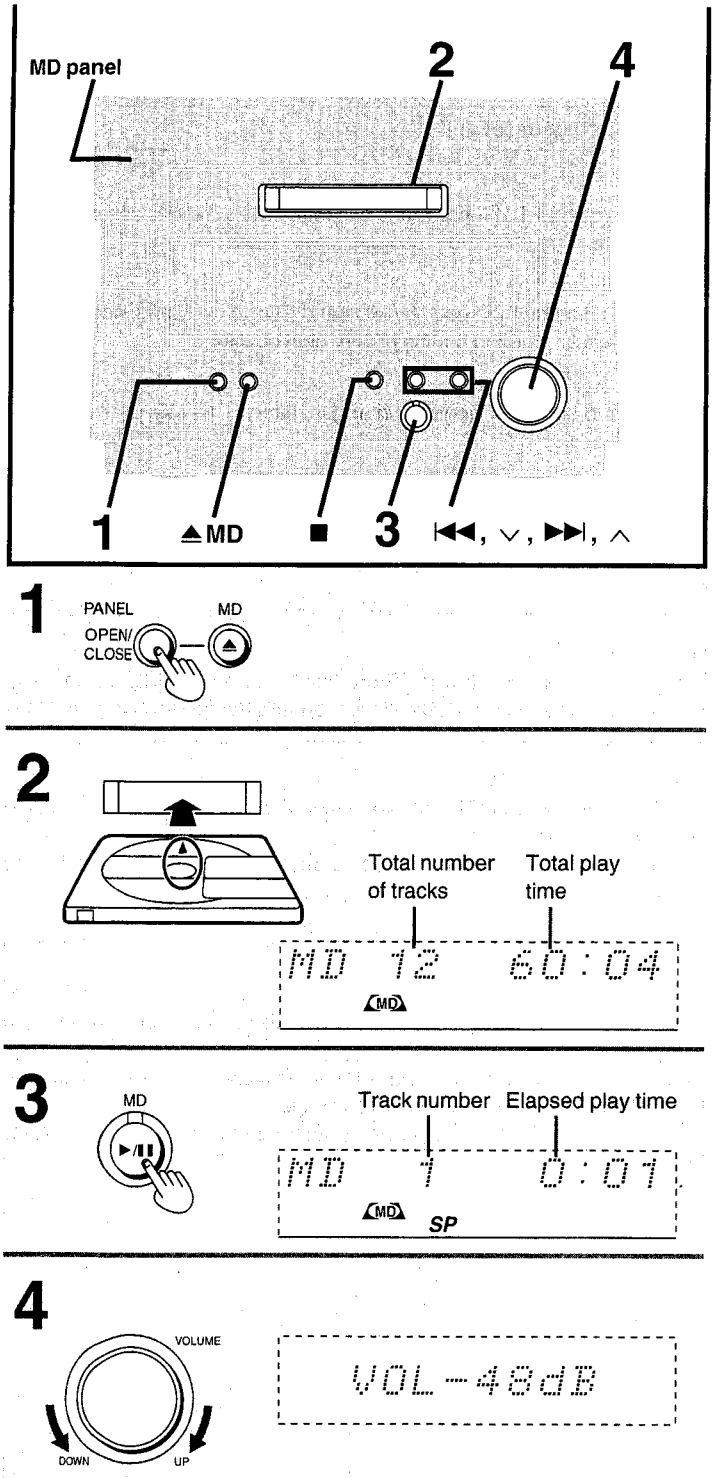
Searching through tracks
During play or pause
Press and hold [⏮, ∨] (backward) or [⏭, ∧] (forward).

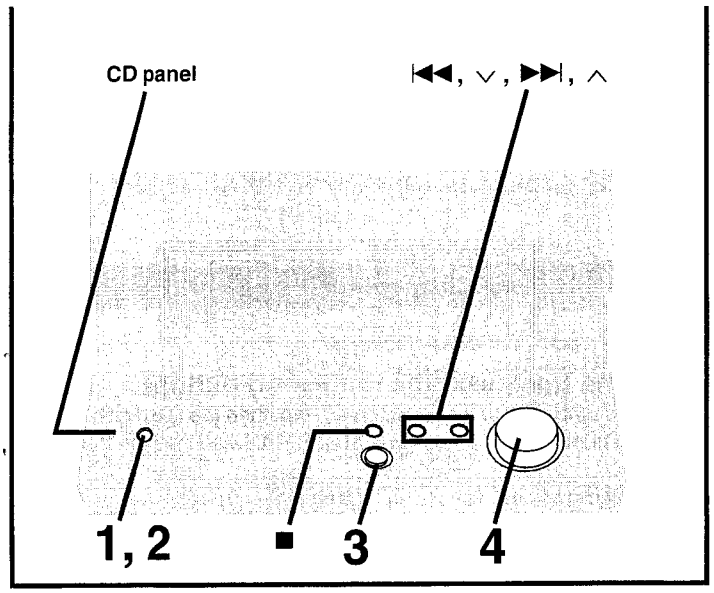
One touch play
When an MD is loaded and the unit is off, press [▶/❚❚, MD]. The unit comes on and starts play.

To eject the MD
Press [▲, MD].

For your reference

A When " ⩥ " is displayed
There are 21 or more tracks on the disc.





CDs

1 Press [▲, CD] to open the tray.

The unit comes on automatically, and the CD panel and tray open.

Note

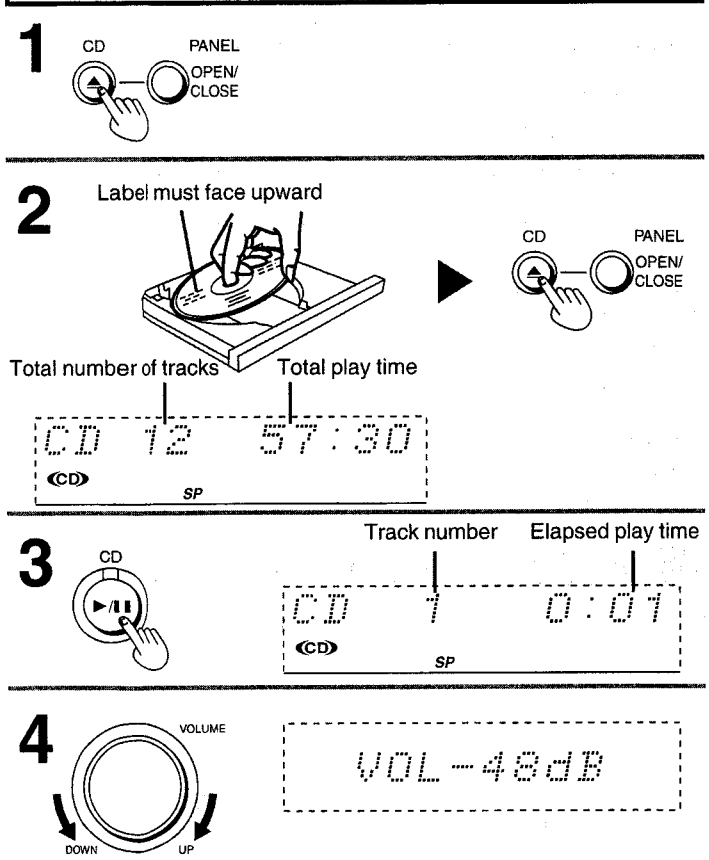
Do not put anything in front of the unit that can block the CD panel.

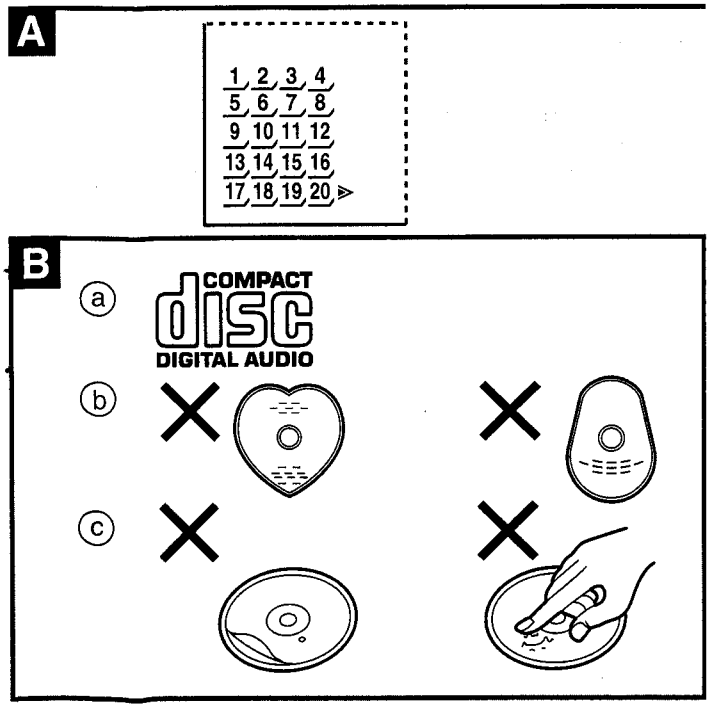
2 Insert the CD.

Set a CD label up on the tray.
Press [▲, CD] to close the tray. (The CD panel remains open.)
If "CD" is selected as the source, the message "TOC Reading" appears on the display then the total number of tracks and total play time are displayed.
If "CD" is not selected as the source, you can see this information by pressing [▶/❚❚, CD] and then [■].

3 Press [▶/❚❚, CD] to start play.

4 Adjust the volume.





To stop the disc

Press [■].

To pause play

Press [▶/❚❚, CD]. Press [▶/❚❚, CD] again to resume play.

Skipping tracks

Press [|◀◀, ∨] (backward) or [▶▶|, ∧] (forward).

Searching through tracks

During play or pause
Press and hold [|◀◀, ∨] (backward) or [▶▶|, ∧] (forward).

One touch play

When a CD is loaded and the unit is off, press [▶/❚❚, CD]. The unit comes on and starts play.

To remove a CD

Press [▲, CD].

For your reference

A When " ⩥ " is displayed

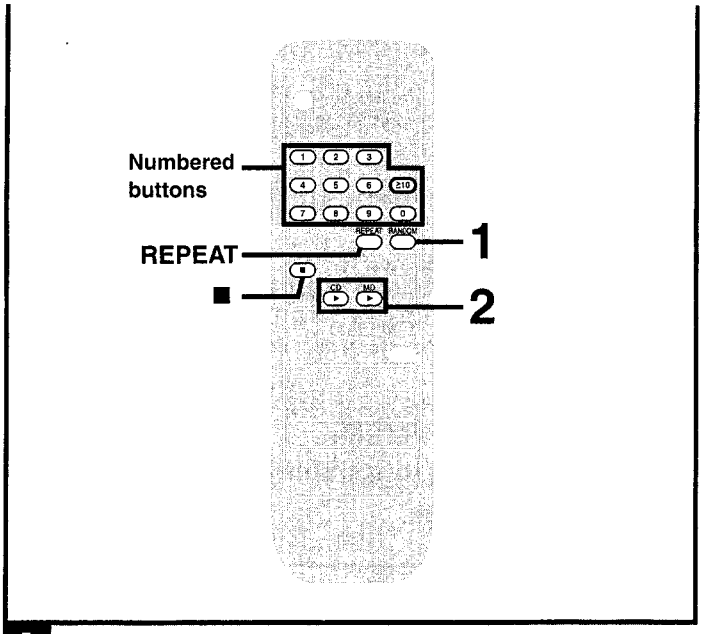
There are 21 or more tracks on the disc.

B CD selection and care

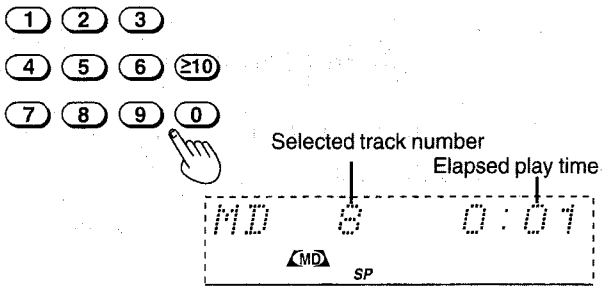
Choose discs with this mark: (ⓐ)

Do not;

- use irregularly shaped discs. (ⓑ)
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers. (ⓒ)
- attach scratch-proof covers or any other kind of accessory.
- write anything on the CD.
- clean CDs with liquids. (Wipe with a soft, dry cloth.)
- use CDs printed with label printers available on the market.



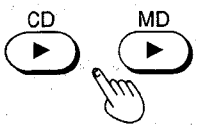
A



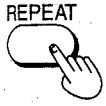
B

1

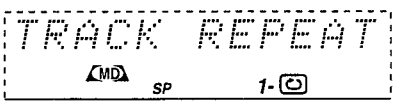
2



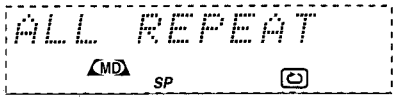
C



ⓐ



ⓑ



Other MD and CD functions

Remote control only

Preparation:
Press [▶, MD] or [▶, CD] to select "MD" or "CD" as the source then press [■].

A Direct play

You can start play from a selected track.

Select the track with the numbered buttons.

For tracks numbered 10 and over, press [≥10] then the two digits.
For tracks numbered 100 and over, press [≥10] twice then the three digits (MD only).
e.g. To select track no. 132: [≥10]→[≥10]→[1]→[3]→[2]

B Random play

You can play the tracks once each in random order.

While the disc is stopped

1 Press [RANDOM].

2 Press [▶, MD] or [▶, CD] to start play.

To cancel

While the disc is stopped
Press [RANDOM].

Note

- You cannot skip to tracks already played in random play.
- You can search only within tracks in random play.
- MD editing is not possible during random play.
- Random play does not work in program mode. Press [PROGRAM] to cancel the mode (➡ page 15).

C Repeat play

Press [REPEAT] before or during play.

Each time you press the button:

→TRACK REPEAT (1-↻)→ALL REPEAT(↻)→Original display (repeat off)

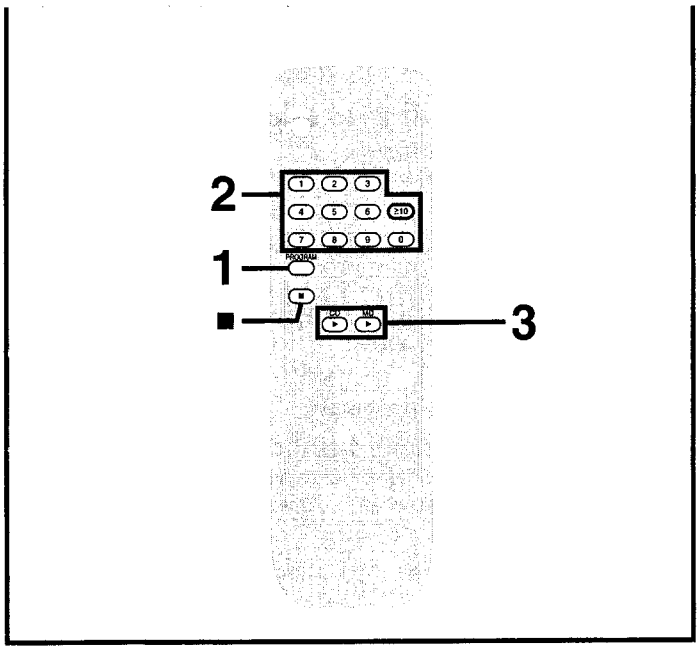
ⓐ TRACK REPEAT (1-↻): Repeat only one track
ⓑ ALL REPEAT (↻): Repeat all tracks

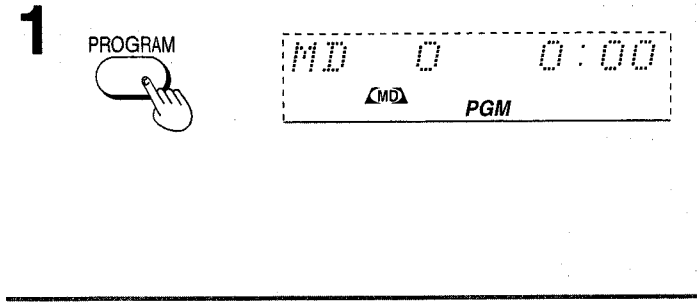
To cancel

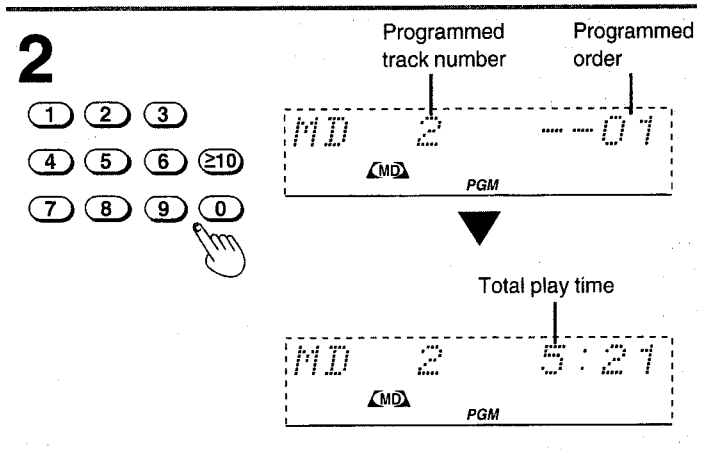
Press [REPEAT] to clear "1-↻" or "↻".

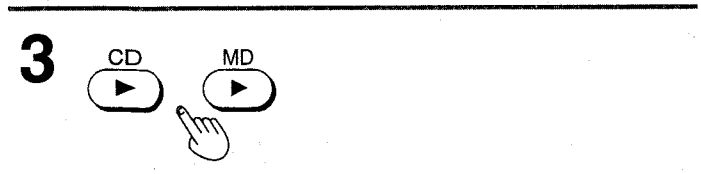
To repeat programmed tracks

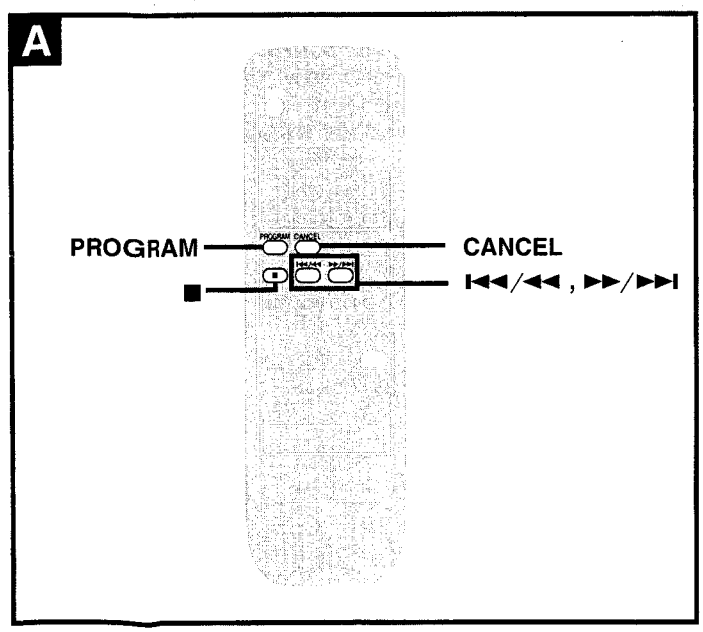
① Program desired tracks (➡ page 15).
② Press [REPEAT] to select "ALL REPEAT (↻)" and start play.











Other MD and CD functions

Remote control only

Preparation:
Press [►, MD] or [►, CD] to select "MD" or "CD" as the source then press [■].

Program play

You can select up to 24 tracks to play in the order you choose.

1 While stopped
Press [PROGRAM].

2 **Enter the track number with the numbered buttons.**
For tracks numbered 10 and over, press [≥10] then the two digits.
For tracks numbered 100 and over, press [≥10] twice then the three digits (MD only).

Repeat this step to program the tracks in the required order.

3 **Press [►, MD] or [►, CD].**
All the selected tracks are played in the selected order.

A Do the following while the disc is stopped and "PGM" is on the display

To cancel program play
Press [PROGRAM].
Programmed contents will be saved in memory.

To check the contents of the program
Press [I◄◄/◄◄] or [►►/►►I]. The track numbers and program positions are displayed in order.

To add to the end of the program
Repeat step 2.

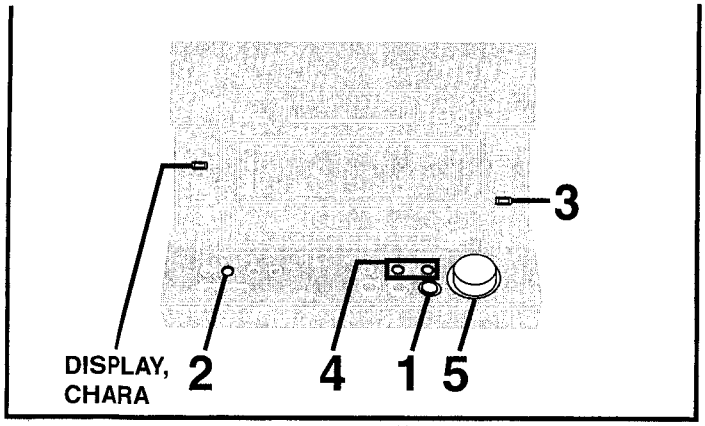
To clear one track at a time
① Press [CANCEL].
② Enter the number of the track you want to clear.
To exit the cancel mode, press [CANCEL] again.

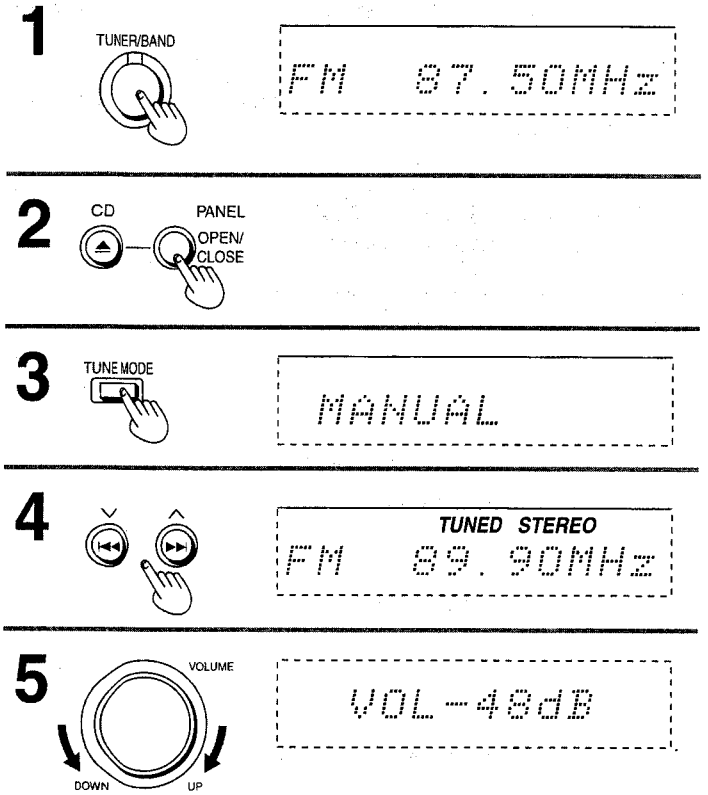
To clear all the tracks
Press [■].
"PGM CLEAR" is displayed and all the tracks are cleared.

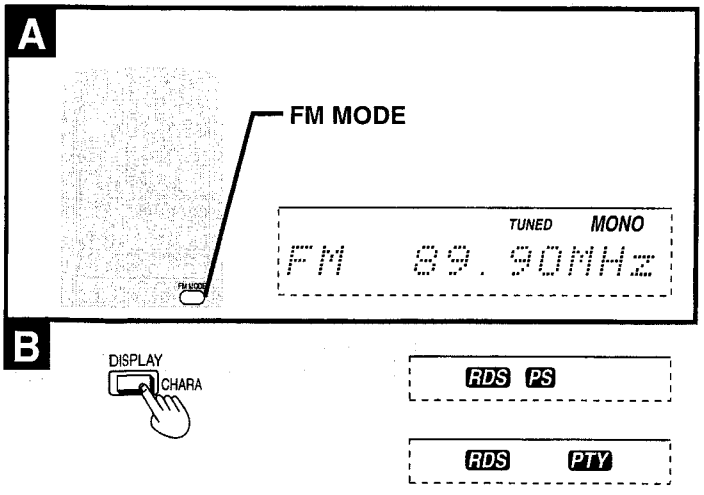
"PROGRAM FULL" is displayed
24 tracks have been programmed.

"--:--" is displayed
Total playing time for the tracks is over 249 minutes and 59 seconds. Tracks can be still programmed and played.

Note
- Skipping is done in the selected order in program play.
- You can search only within tracks in CD program mode.
- MD editing is not possible during program play.
- Program play does not work in random mode. Press [RANDOM] to cancel the mode (➡ page 14).







Program type displays			
NEWS	VARIED	FINANCE	COUNTRY
AFFAIRS	POP M	CHILDREN	NATIONAL
INFO	ROCK M	SOCIAL A	OLDIES
SPORT	M.O.R M*	RELIGION	FOLK M
EDUCATE	LIGHT M	PHONE IN	DOCUMENT
DRAMA	CLASSICS	TRAVEL	TEST
CULTURE	OTHER M	LEISURE	ALARM
SCIENCE	WEATHER	JAZZ	

The radio: manual tuning

1 Press [TUNER/BAND] to select "FM" or "AM".
The unit comes on automatically.
Each time you press the button:
FM⇄AM

2 Press [CD, PANEL OPEN/CLOSE].
The CD panel opens.

3 Press [TUNE MODE] to select "MANUAL".
Each time you press the button:
MANUAL⇄PRESET

4 Press [|◀◀, ∨] or [▶▶|, ∧] to select the frequency of the required station.
"TUNED" is displayed when a radio station is tuned.
"STEREO" is displayed when a stereo FM broadcast is being received.

5 Adjust the volume.

Auto tuning

Press and hold [|◀◀, ∨] or [▶▶|, ∧] for a moment until the frequency starts changing rapidly. The unit begins auto tuning, stopping when it finds a station.

- Auto tuning may not function when there is excessive interference.
- To cancel auto tuning, press [|◀◀, ∨] or [▶▶|, ∧] once again.

A If noise is excessive in FM

Remote control only

Press [FM MODE] to display "MONO".
This mode improves sound quality if reception is weak, but broadcasts will be heard in monaural.
Press [FM MODE] again to cancel the mode.
"MONO" goes out. MONO is also canceled if the frequency is changed.
Turn off "MONO" for normal listening. Stereo and monaural broadcasts are automatically played as they are received.

B RDS broadcasting

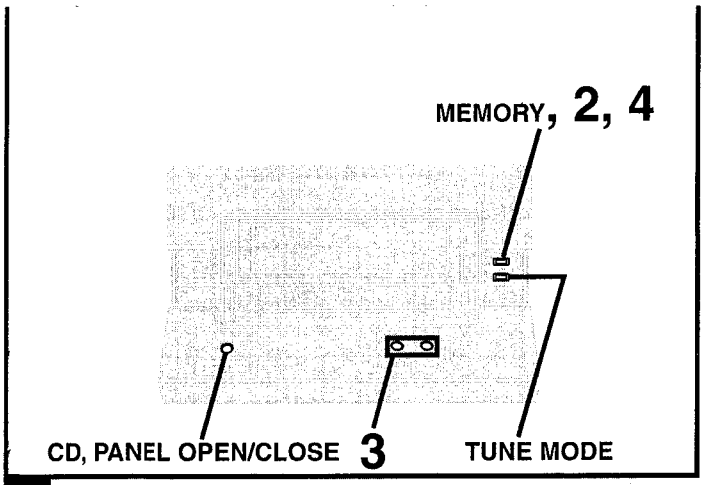
This unit can display the text data transmitted by the radio data system (RDS) available in some areas.
If the station you are listening to is transmitting RDS signals, "RDS" will light up on the display.

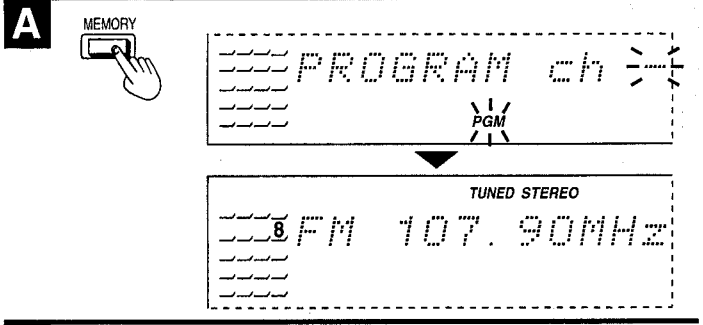
Displaying the name of a broadcasting station or a program type
When the MD panel is open
Press [DISPLAY, CHARA].
Each time you press the button:
Frequency display→Station name→Program type*
*If an MD is loaded, the remaining time on the MD is shown next.

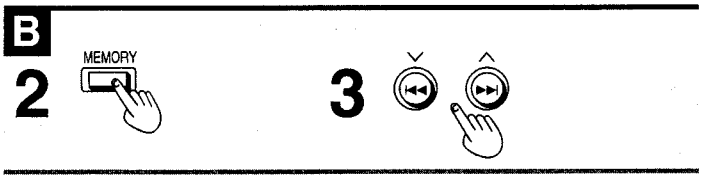
If the station name display isn't shown
Press and hold [DISPLAY, CHARA] for about 4 seconds while "PS" is displayed.
The mode switches every time the button is pressed and held:
MODE 1⇄MODE 2

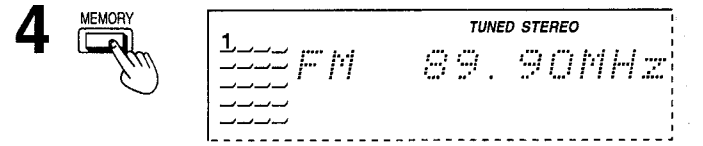
Note
RDS displays may not be available if reception is poor.

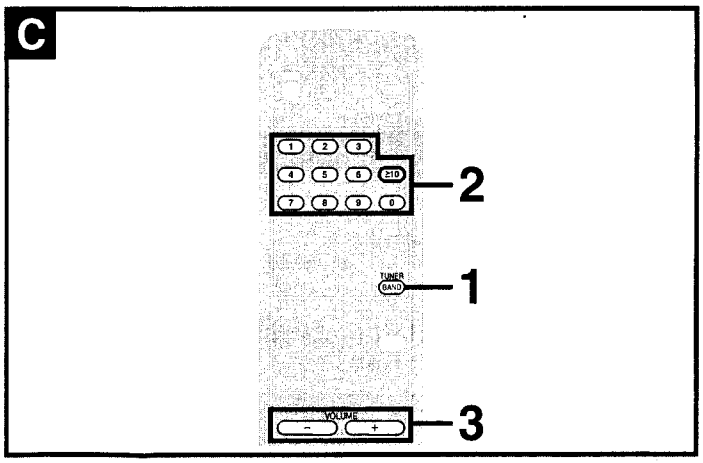
*"M.O.R M"="Middle of the road music"

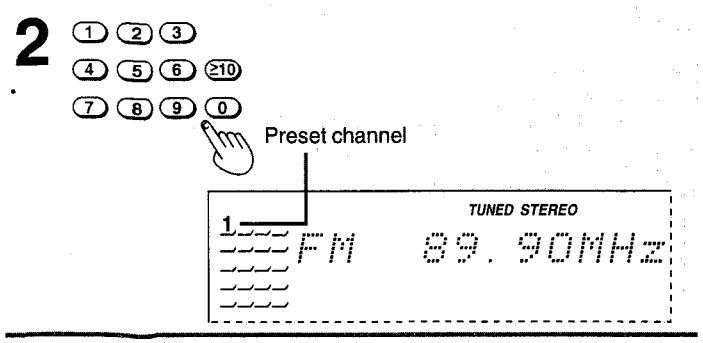












The radio: preset tuning

There are two methods of presetting stations.
Automatic presetting: All the stations the tuner can receive are preset.
Manual presetting: You can select the stations to preset and the order they are preset in.
Up to 15 stations each can be set in the FM and AM bands.

Preparation:
Press [CD, PANEL OPEN/CLOSE] to open the CD panel.

A Automatic presetting

Do the following once each for FM and AM.

Preparation:
Tune to the frequency where presetting is to begin (➡ page 16).

Press and hold [MEMORY].

Release the button when "AUTO" appears.
The tuner presets all the stations it can receive into the channels in ascending order. When finished, the last station memorized is tuned in.

B Manual presetting

Preset the stations one at a time.

1 Tune to the required station.
2 Press [MEMORY].
3 While "PGM" is flashing (about 10 seconds)
Press [⏮, ∨] or [⏭, ∧] to select a channel.
4 Press [MEMORY].

Repeat steps 1 to 4 to preset other stations.

The station occupying a channel is erased if another station is preset in that channel.

C Selecting channels

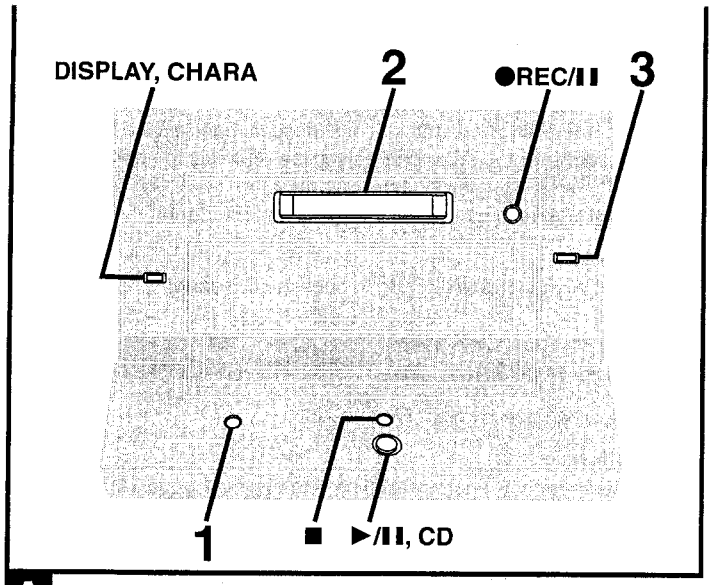
On the remote control

1 Press [TUNER, BAND] to select "FM" or "AM".
The unit comes on automatically.
Each time you press the button:
FM⇄AM

2 Press the numbered buttons to select the channel.
For channels 1 to 9 press the corresponding number.
For channels 10 to 15 press [≥10], then the two digits.

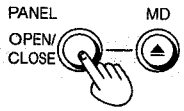
3 Adjust the volume.

On the main unit
① Press [TUNE MODE] to select "PRESET".
② Press [⏮, ∨] or [⏭, ∧] to select the preset channel.



A

1



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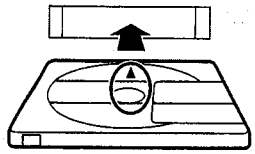

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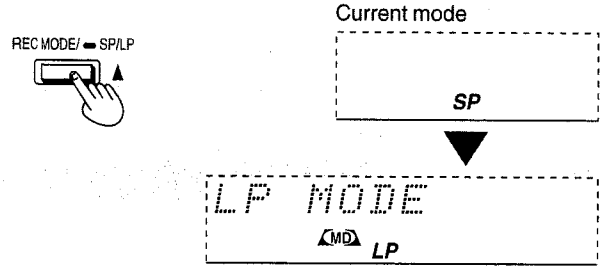

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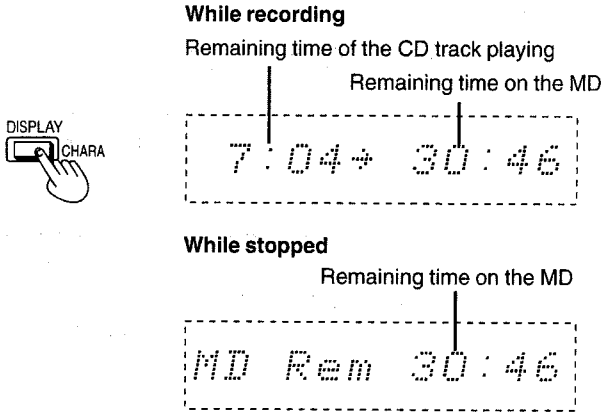

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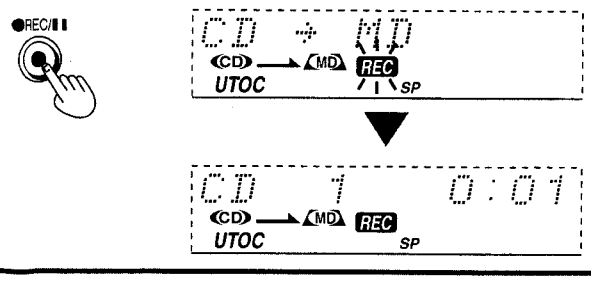
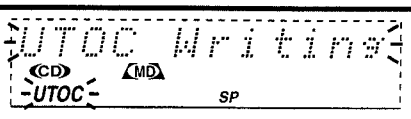


D



Before recording

Volume and sound quality

Recordings are unaffected by changes to volume and sound quality.

Your attention is drawn to the fact that recording pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

A Preparatory steps

Do these steps before each recording.

1 Press [MD, PANEL OPEN/CLOSE].

2 Insert the MD. (➡ page 12)

3 While a source other than "MD" is selected

Press and hold [REC MODE/–SP/LP] to select the SP/LP mode.

Each time you press and hold the button:
SP MODE⇄LP MODE

SP MODE: Standard recording

LP MODE: Long play recording (monaural)
148 minutes worth of material can be recorded onto a 74 minute MD.

Note

You cannot select the SP/LP mode by pressing and holding [REC MODE] on the remote control.

B To see how much time is left on an MD

Press [DISPLAY, CHARA] until the remaining time is displayed.

Recording CDs

C Normal recording

Preparation:

Do the preparatory steps (➡ above).
Insert the CD (➡ page 13) and press [▶/❚❚, CD] to select "CD" as the source then press [■].

Press [● REC/❚❚] to start recording.

"UTOC" lights when recording begins.

When recording is finished

When the CD finishes the MD also stops.

D The message "UTOC Writing" and "UTOC" stop flashing on the display.

To stop recording

Press [■].
Both CD and MD stop.

To pause recording

Press [● REC/❚❚].
Both CD and MD pause. A track mark is added.
Press the button again to resume recording.

To record programmed tracks

Program tracks (➡ page 15), then press [● REC/❚❚].

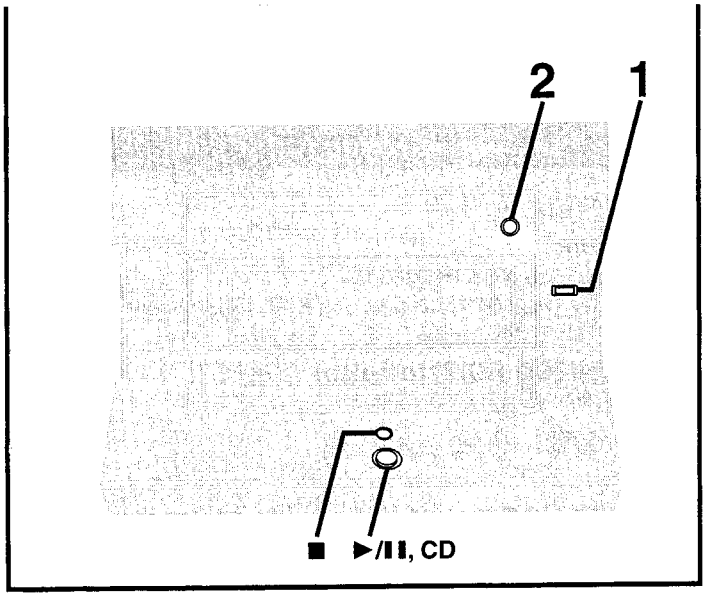
To start recording a track that is playing

Press [● REC/❚❚] while the CD is playing.
The track returns to the beginning and recording starts.

- The MD stops when the last track finishes.
- In the "1-REC" mode (➡ page 20), the MD stops when the track finishes.

To start recording with the remote control

Press the two recording buttons ([REC]) at the same time.



Auto edit recording (AUTO REC)

This function automatically records all tracks on the CD onto an MD as long as the remaining time on the MD allows.

- Track marks are automatically inserted.
- A track will not be recorded if remaining time doesn't allow complete recording.

Preparation:

Do the preparatory steps (➡ page 18).
Insert the CD (➡ page 13) and press [►/❚❚, CD] to select "CD" as the source then press [■].

1 Press [CD EDIT] to select "AUTO REC".

Each time you press the button:

AUTO REC→1-REC→OFF

2 Press [● REC/❚❚] to start recording.

"UTOC" lights when recording begins.

When recording is finished

When the CD finishes the MD also stops.

A The message "UTOC Writing" and "UTOC" stop flashing on the display.

Auto edit recording is canceled after recording.

To stop recording

Press [■].
Both CD and MD stop.

To record programmed tracks

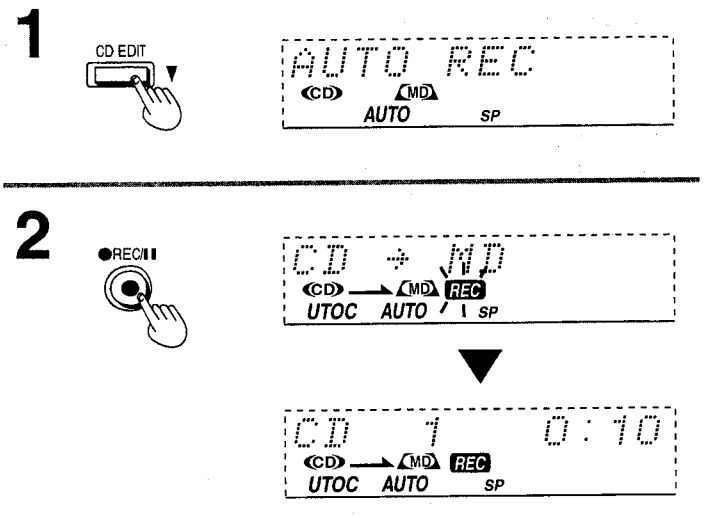
① Program tracks (➡ page 15).
② Press [CD EDIT] to select "AUTO REC".
③ Press [● REC/❚❚].

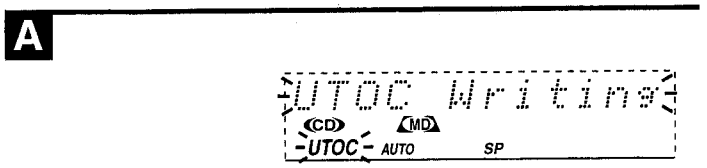
B To start recording with the remote control

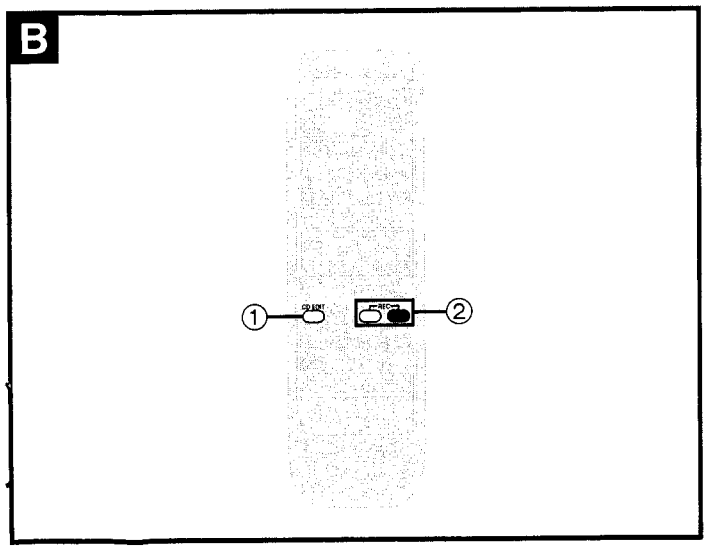
① Press [CD EDIT] to select "AUTO REC".
② Press the two recording buttons ([REC]) at the same time.

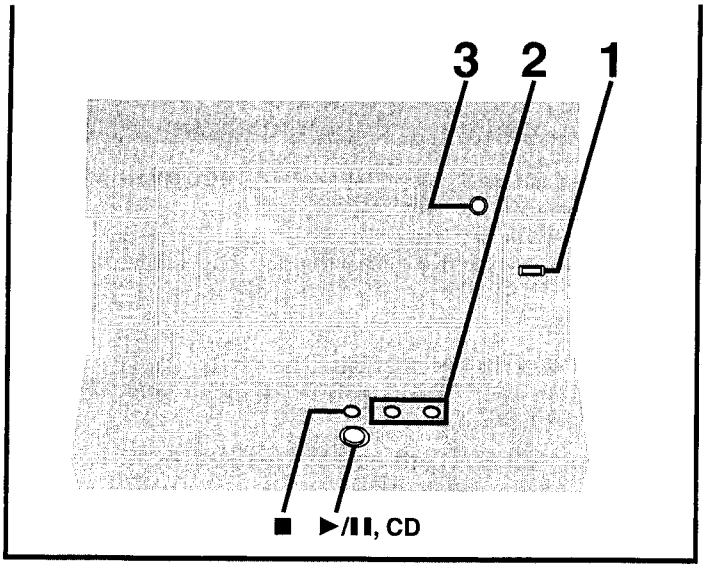
Note

Auto edit recording cannot be used with random and repeat play.









One track edit recording (1-REC)

Records one track from a CD.

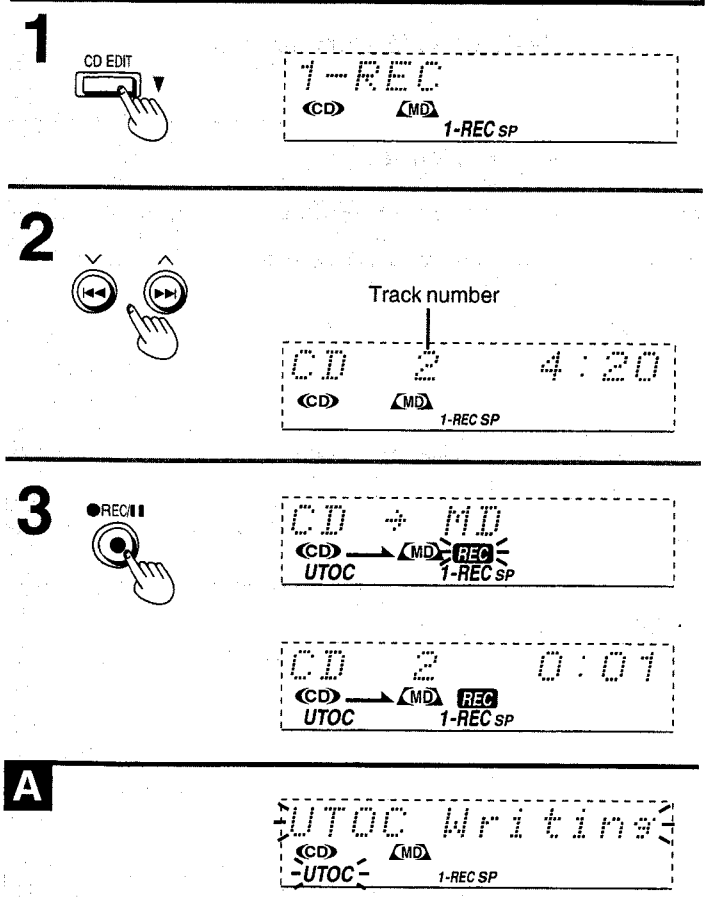
Preparation:
Do the preparatory steps (➡ page 18).
Insert the CD (➡ page 13) and press [►/II, CD] to select "CD" as the source then press [■].

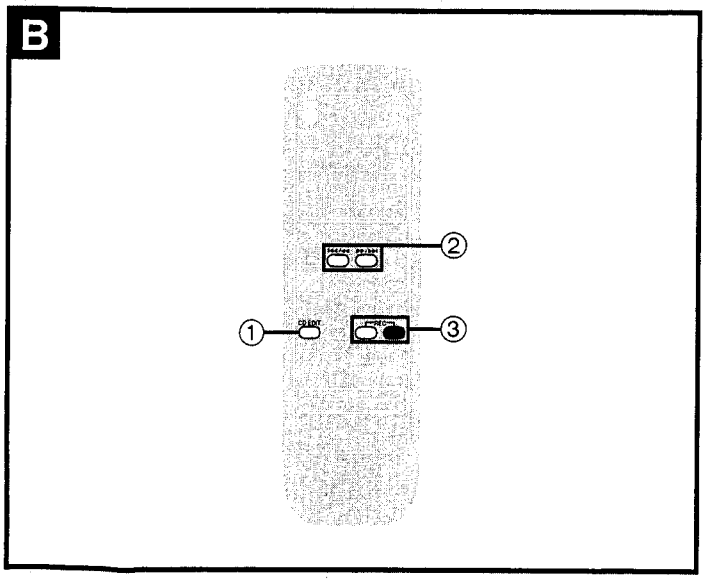
1 Press [CD EDIT] to select "1-REC".
Each time you press the button:

AUTO REC→1-REC→OFF

2 Press [|◄◄, ∨] or [►►|, ∧] to select the track to be recorded.
(Unnecessary when recording the first track.)

3 Press [● REC/II] to start recording.
"UTOC" lights when recording begins.





When recording is finished
When the track finishes the MD also stops.
A The message "UTOC Writing" and "UTOC" stop flashing on the display.

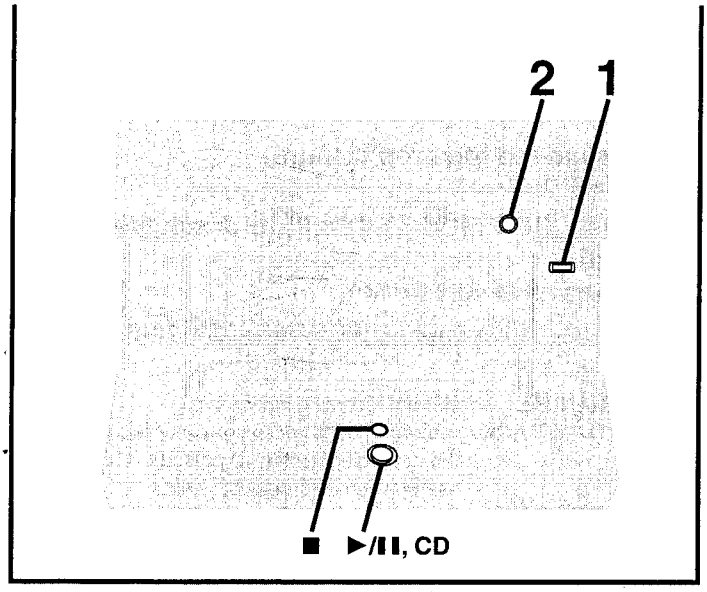
To continue recording with another CD
Replace the CD and repeat steps 2 and 3.

To stop recording
Press [■].
Both CD and MD stop.

To cancel one track edit recording
Press [CD EDIT] to select "OFF".

B To start recording with the remote control
① Press [CD EDIT] to select "1-REC".
② Press [|◄◄/◄◄] or [►►/►►|] to select the track.
③ Press the two recording buttons ([REC]) at the same time.

For your reference
If you select one track edit recording when in program mode, the first programmed track will be recorded.



High speed recording

Preparation:
Do the preparatory steps (➡ page 18).
Insert the CD (➡ page 13) and press [►/❚❚, CD] to select "CD" as the source then press [■].

1 Press [REC MODE/–SP/LP] to select "HIGH-SPEED".
Each time you press the button:
NORMAL-SPEED⇄HIGH-SPEED

2 Press [● REC/❚❚] to start recording.
"UTOC" lights when recording begins.

When recording is finished
When the CD finishes the MD also stops.
A The message "UTOC Writing" and "UTOC" stop flashing on the display.

To stop recording
Press [■].
Both CD and MD stop.

Note
You cannot use high-speed recording with program play, repeat play, or random play.

For your reference
- You can use high-speed recording with "AUTO REC" and "1-REC".
- High-speed recording is automatically canceled when you select any mode other than "CD" or turn the unit off.

Limitations on high-speed recording

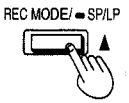
This unit uses a copy management system to limit the use of high-speed recording to protect the rights of the producers of music software.

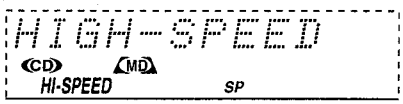
■ **You cannot use high-speed recording to record the same track twice within 74 minutes of starting recording.**
- Even if you stop recording part way through, you cannot start recording the same track again.
- If, for example, you complete recording in 20 minutes, you must wait a further 54 minutes before using high-speed recording to record the track again. You can record the track at normal speed.

■ **You can record up to 50 tracks.**
- If you finish recording 50 tracks within 74 minutes, you cannot start recording the fifty-first track until 74 minutes have passed since you started recording the first track.

If you try to start recording within the above limitations, the message "PLEASE WAIT" and the number of minutes you have to wait flash alternately on the display.

1





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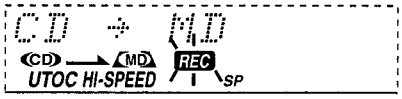

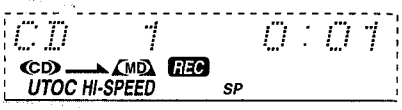

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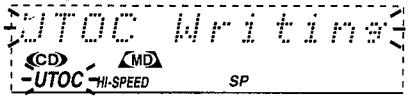
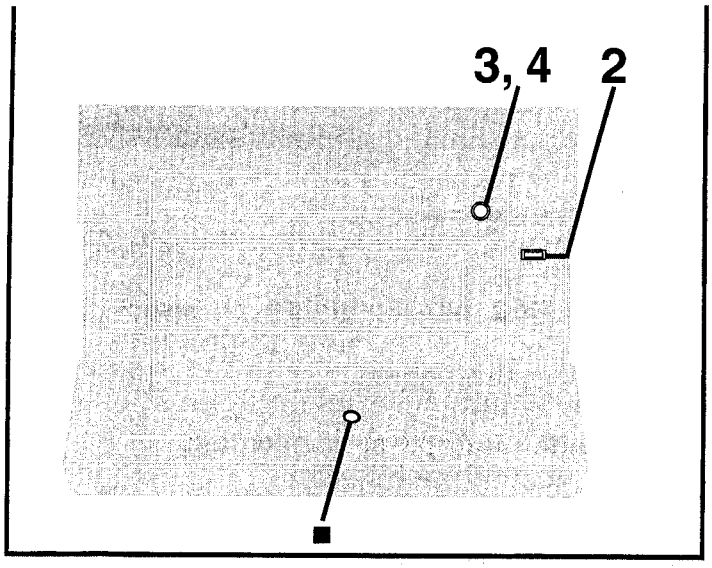




Recording the radio

Preparation: Do the preparatory steps (➡ page 18).

1 Tune to the required station.
(➡ pages 16 and 17)

2 Press [REC MODE/–SP/LP] to select the desired mode.
Each time you press the button:

MANUAL→TURN BACK→TIME MARK→TURN/TIME
↑_____↓

ⓐ **MANUAL:** Normal recording mode
ⓑ **TURN BACK:** Records sound received a few seconds before the recording button is pressed. This mode is useful when recording the radio.
ⓒ **TIME MARK:** Track marks inserted every five minutes.
ⓓ **TURN/TIME:** A combination of turn back and time mark.

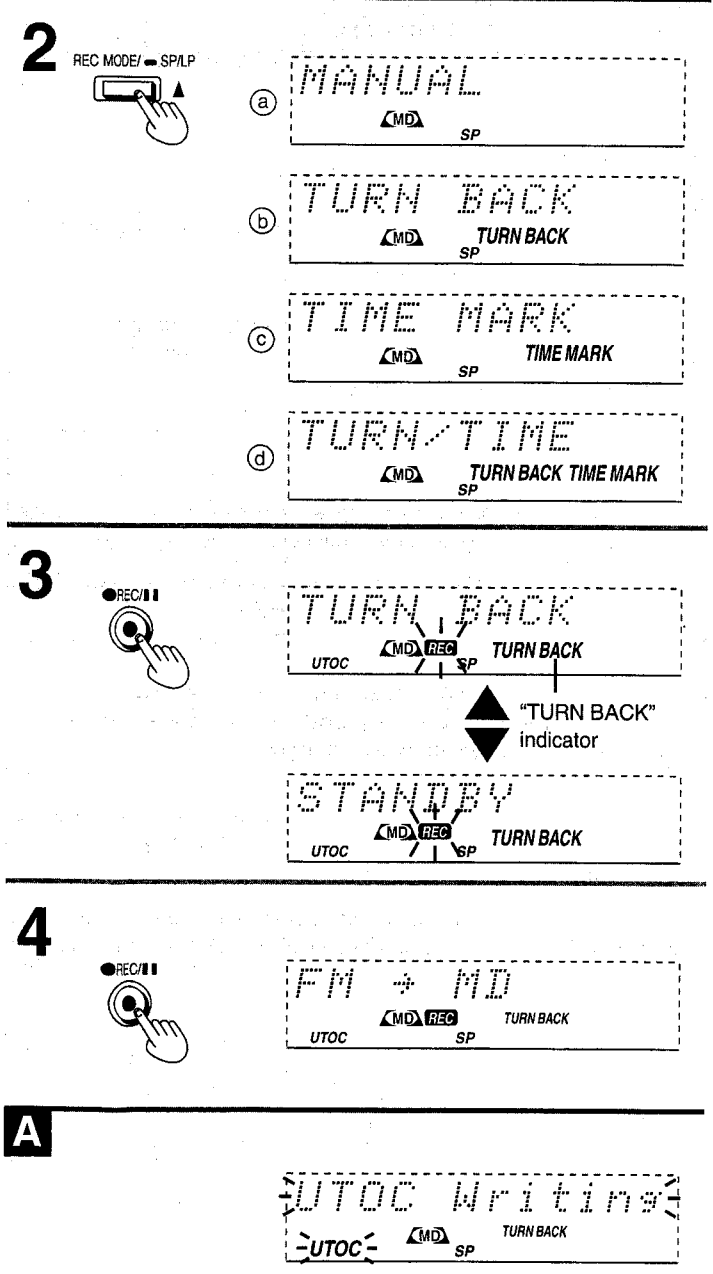
3 If you selected "TURN BACK" or "TURN/TIME" in step 2
Press [● REC/❚❚] to enter recording standby.

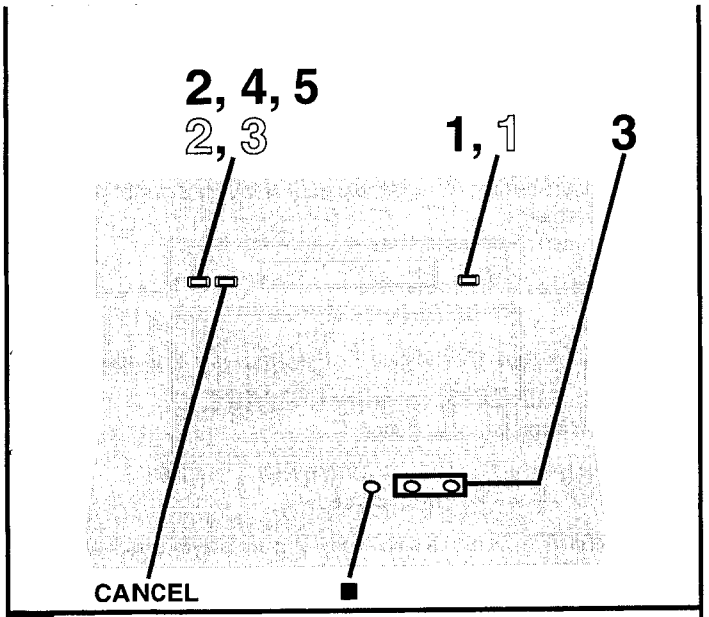
Note
Wait until the "TURN BACK" indicator stops flashing before proceeding to step 4 to start recording. (Turn back may not function correctly if recording is started while the indicator is flashing.)

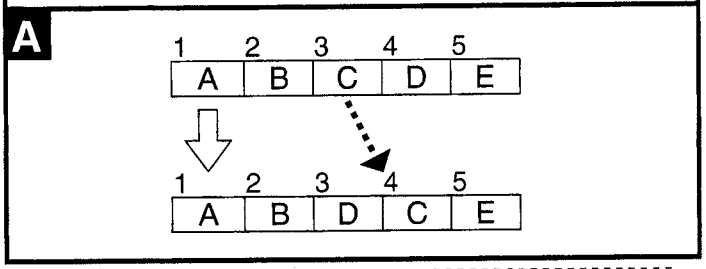
4 Press [● REC/❚❚] to start recording.

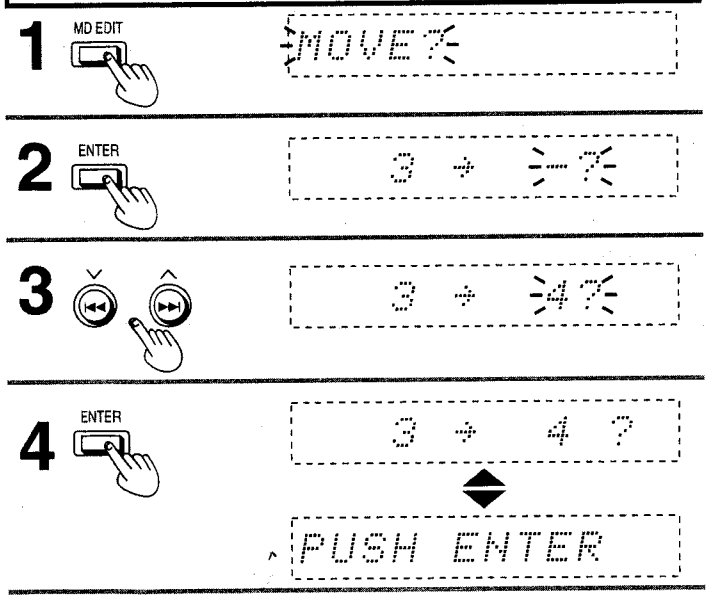
To stop recording
Press [■].
A The message "UTOC Writing" and "UTOC" stop flashing on the display.

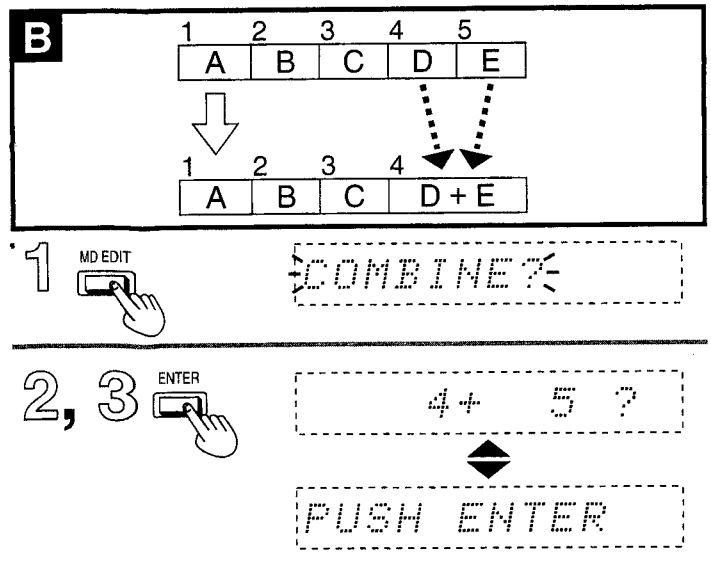
To pause recording
Press [● REC/❚❚].
A track mark is added.
Press the button again to resume recording.











MD editing

A Moving tracks—MOVE

This function allows you to permanently change the order tracks are played in.
Make sure the disc is record enabled.

Preparation:
Insert the MD (➡ page 12).
Play the track you want to move, or, select "MD" as the source and select the track with [|◀◀, ∨] or [▶▶|, ∧] while the disc is stopped.

1 Press [MD EDIT] to select "MOVE?".
Each time you press the button:
TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?
↑————TRACK TITLE?←————┘
"DIVIDE?" is only displayed if the track is playing.
"COMBINE?" will not be displayed if you are playing track number 1.

2 Press [ENTER].
The track's current number is shown and the new position flashes to the right of it.

3 Press [|◀◀, ∨] or [▶▶|, ∧] to select the new track number.

4 Press [ENTER].
The old track number and new track number are displayed.

5 Press [ENTER] to confirm the new track number.
Play stops and "UTOC Writing" and "UTOC" flash on the display. When this stops flashing, the new track number has been entered.

To cancel part way through
Press [■] or [CANCEL].

To return the track to its original position
Repeat the above steps, selecting the track's original number in step 3.

MD editing

B Combining tracks—COMBINE

This function removes track marks so the tracks either side effectively become one track.
Make sure the disc is record enabled.

Preparation:
Insert the MD (➡ page 12).
Play the track that comes after the track mark you want to remove, or, select "MD" as the source and select the track with [|◀◀, ∨] or [▶▶|, ∧] while the disc is stopped.

1 Press [MD EDIT] to select "COMBINE?".
Each time you press the button:
TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?
↑————TRACK TITLE?←————┘
"DIVIDE?" is only displayed if the track is playing.
"COMBINE?" will not be displayed if you are playing track number 1.

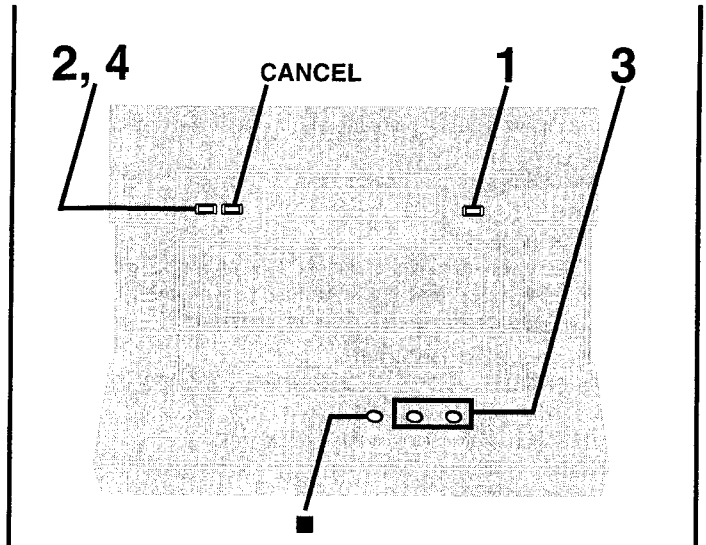
2 Press [ENTER].
The track numbers to be combined are displayed, and if you were playing a track, the unit plays a segment of starting 8 seconds before the old track mark and continuing 8 seconds after it (16 seconds in LP mode).

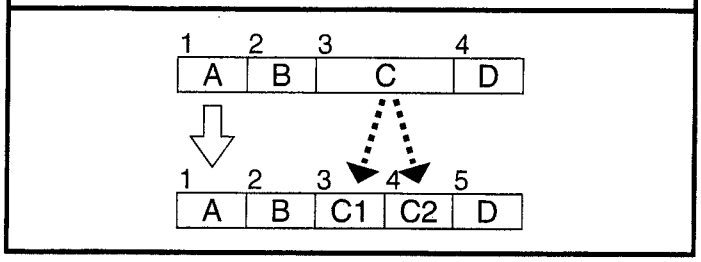
3 Press [ENTER] to confirm the combination.
Play stops and "UTOC Writing" and "UTOC" flash on the display. When this stops flashing the track mark has been removed and the two tracks now are counted as one.

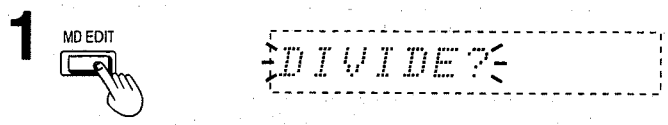
To cancel part way through
Press [■] or [CANCEL].

To divide the tracks again
Use DIVIDE (➡ page 24).

Note
- If you combined titled tracks, the combined track retains only the title of the first track.
- You cannot combine a track recorded in SP mode with a track recorded in LP mode.







MD editing

Dividing tracks—DIVIDE

This function allows you to manually add track marks.
You can edit a recording of a radio program or divide a symphony into its separate movements.
Adding track marks will not interrupt sound.

Make sure the disc is record enabled.

Preparation:
Insert the MD (➡ page 12) and play the track you want to divide.

1 Press [MD EDIT] to select "DIVIDE?".
Each time you press the button:

TRACK ERASE?→MOVE?→COMBINE?→DIVIDE?
↑——————TRACK TITLE?←——————┘

"COMBINE?" will not be displayed if you are playing track number 1.

2 Press [ENTER] at the approximate point you want the track mark to go.
A four second segment of the track, beginning at the selected point, is played repeatedly. (If the track is recorded in LP mode, approximately 8 seconds.)

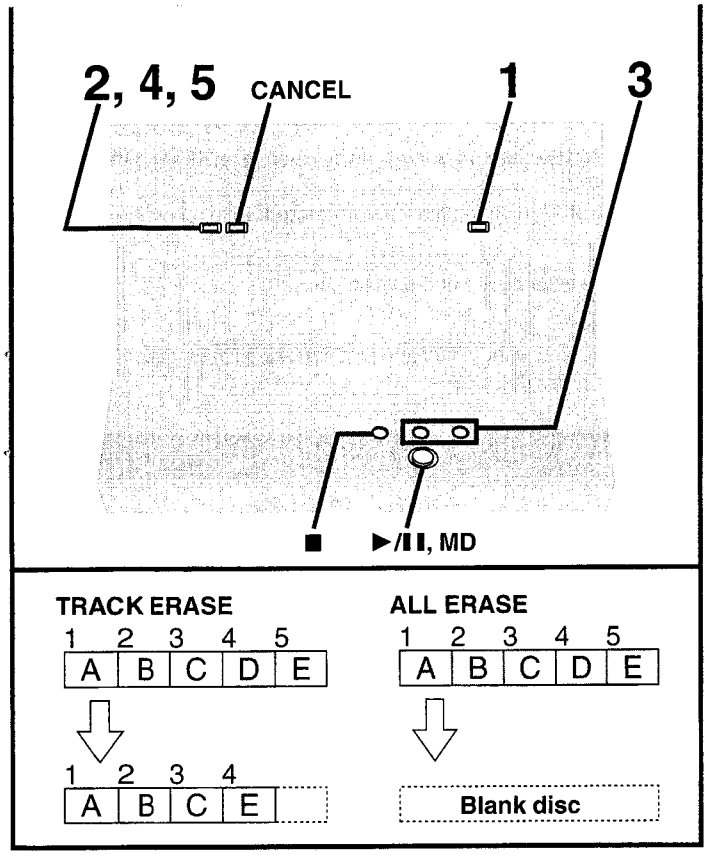
3 Press [⏮, ∨] or [⏭, ∧] to adjust the point.
Adjustments can be made between −128 and +127, approximately 8 seconds either side of the original point. (If the track is recorded in LP mode, approximately 16 seconds.)

4 Press [ENTER].
Play stops and "UTOC Writing" and "UTOC" flash on the display. When this stops flashing, the new track mark has been entered.

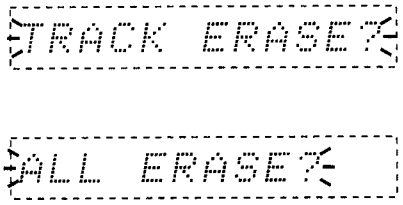
To cancel part way through
Press [■] or [CANCEL].

To remove the track mark again
Use COMBINE (➡ page 23).

Note
If you divide a titled track, the part after the new track mark becomes untitled.

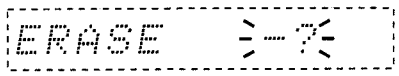


1

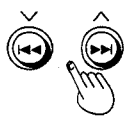


2

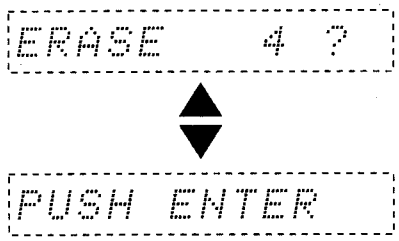
TRACK ERASE



3



4



5

ALL ERASE

MD editing

Erasing tracks and creating blank discs

There are two types of erasing;

TRACK ERASE: You can erase between 1 and 24 tracks at a time.
ALL ERASE: You can erase all the tracks.
Make sure the disc is record enabled.

Preparation:
Insert the MD (➡ page 12) and press [▶/❚❚, MD] to select "MD" as the source then press [■].

1 While stopped
Press [MD EDIT] to select "TRACK ERASE?" or "ALL ERASE?".
Each time you press the button:

TRACK ERASE?→ALL ERASE?→MOVE?
↑ ↓
TITLE ST.?←DISC TITLE?←COMBINE?

2 Press [ENTER].

With TRACK ERASE

3 Press [|◀◀, ∨] or [▶▶|, ∧] to select the track.

4 Press [ENTER].

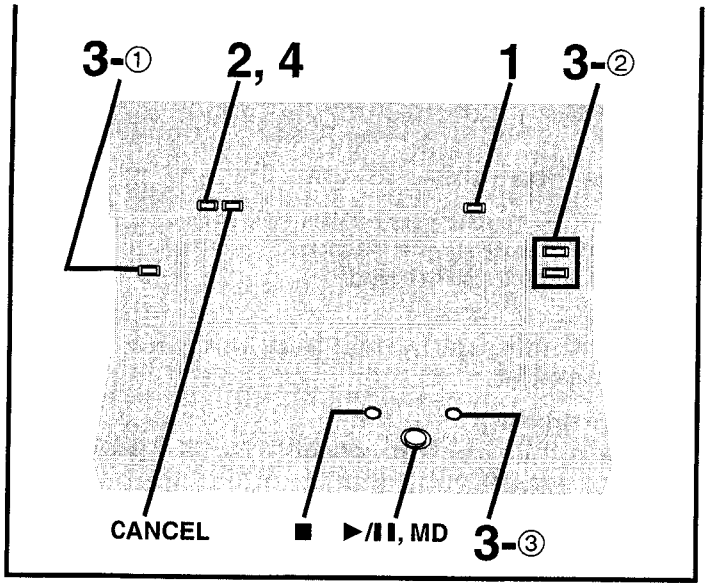
Repeat steps 3 and 4 to select other tracks to erase.

5 Press [ENTER].
"UTOC Writing" and "UTOC" flash on the display.
TRACK ERASE:
When they stop flashing the track has been erased. The tracks after it move back to fill the space so there is no missing track number after a track is erased.
ALL ERASE:
When they stop flashing the disc has been erased and "BLANK DISC" is shown on the display.

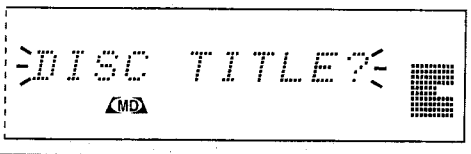
To cancel part way through
Press [■] or [CANCEL].

You can use TRACK ERASE while playing or paused.
① Press [MD EDIT] to select "TRACK ERASE?" while the track you want to erase is playing or paused.
② Press [ENTER] twice.

If "SELECT OVER" is displayed
You have tried to select more than 24 tracks.
You cannot select anymore tracks to erase.



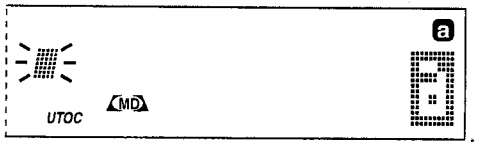
1 MD EDIT



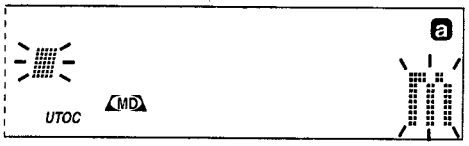
2 ENTER

3

① DISPLAY/CHARA

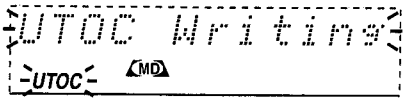


② REC MODE/ ➡ SP/LP ▲
CD EDIT ▼

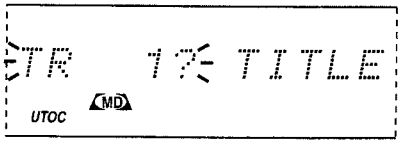


③ ^

4 ENTER



▼



MD editing

Titling discs and tracks

Titles of up to 100 characters long can be given to an MD and the tracks on it.
A maximum of 1200 characters can be entered while recording or playing.

Note
You can only enter titles with the main unit.

Preparation:
Insert the MD you want to title and press [►/❚❚, MD] to select "MD" as the source then press [■].

Entering titles after recording

Titling discs

1 While stopped
Press [MD EDIT] to select "DISC TITLE?".
Each time you press the button:

TRACK ERASE? → ALL ERASE? → MOVE? → COMBINE? → DISC TITLE? → TITLE ST.? → (back to TRACK ERASE?)

2 **Press [ENTER].**

3 **Enter the required characters.**

① **Press [DISPLAY, CHARA] to select the type of character.**
Each time you press the button:

Alphabet (Capitals), Numbers and symbols ⟷ Alphabet (Lower case), Numbers and symbols

② **Press [▲, REC MODE/–SP/LP] or [▼, CD EDIT] until the character you want to enter is shown on the display panel.**

③ **Press [►►|, ∧] to enter the letter.**
The cursor moves to the right.

Repeat steps ① to ③ to complete the title.
Step ① is not necessary when you are entering characters of the same type.

4 **Press [ENTER].**
"UTOC Writing" and "UTOC" flash on the display. The title is entered when they stop flashing.

A message appears asking you if you want to title track no. 1.
If you do, press [MD EDIT] and repeat step 3 to continue titling the track.
If you don't, press [■] or [CANCEL].

To cancel part way through
Press [■] or [CANCEL].

Symbols you can enter
You can enter the following symbols.

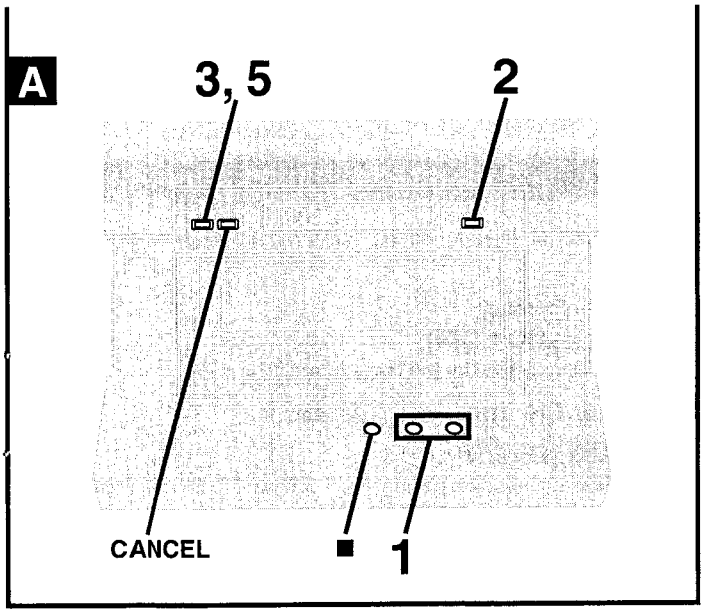
! " # $ % & ' ( ) * + , – . / : ; < = > ? @ _ ` ␣ ▟

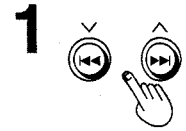
Space To delete

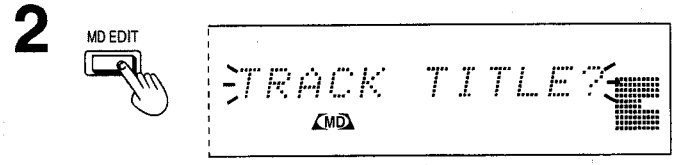
Note
If you enter the maximum number of characters that the MD can hold while you are titling a disc, "TITLE FULL" is shown and the last character you entered is written over.

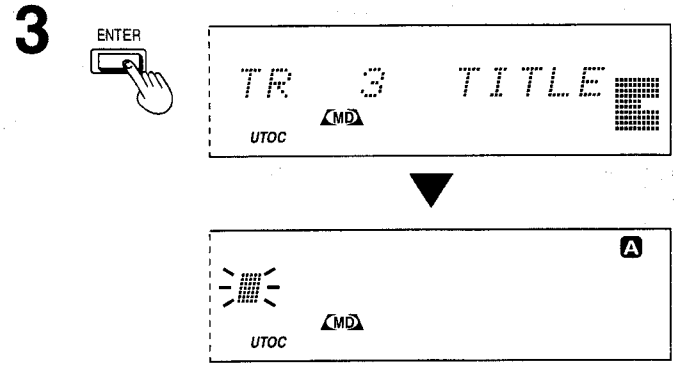
Editing titles ➡ page 27

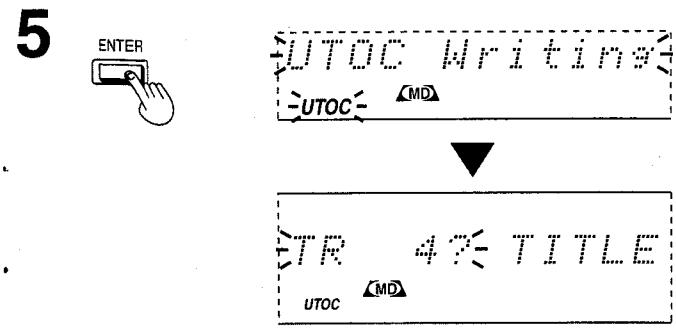
Titling discs and tracks











A Titling tracks

1 While stopped

Press [⏮, ∨] or [⏭, ∧] to select the track.

2 Press [MD EDIT] to select "TRACK TITLE?".

Each time you press the button:

TRACK ERASE? → MOVE?
↑ ↓
TRACK TITLE? ← COMBINE?

3 Press [ENTER].

The titling display for the track you specified is shown.

4 Enter the title. (➡ page 26, step 3)

5 Press [ENTER].

"UTOC Writing" and "UTOC" flash on the display. The title is entered when they stop flashing.

A message appears asking you if you want to title the next track.
If you do, press [MD EDIT]. Continue titling the track from step 4.
If you don't, press [■] or [CANCEL].

To cancel part way through

Press [■] or [CANCEL].
Any titles you have confirmed by pressing [ENTER] remain intact.

Editing titles

To move the cursor

Press [⏮, ∨] or [⏭, ∧].

Replacing letters

① Move the cursor over the letter to be replaced.
② Select the new letter (➡ page 26, step 3).

Inserting a letter or space

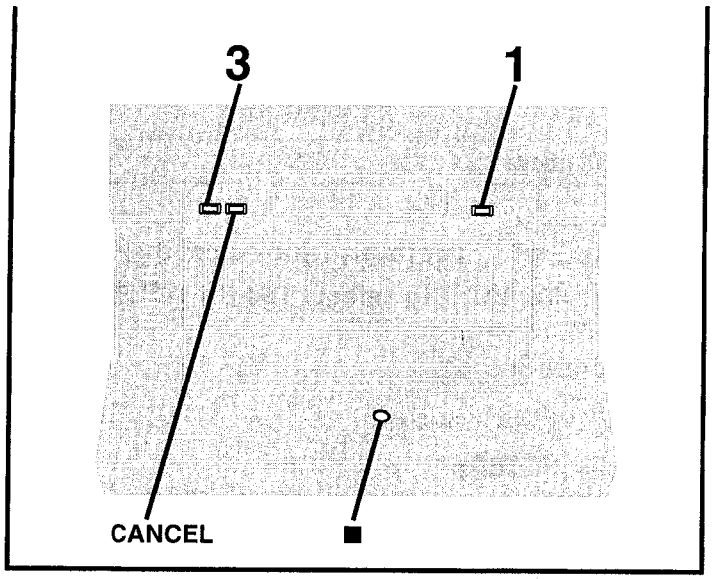
① Move the cursor over the letter to the right of the place where the new letter or space is to go.
② Select "␣" (space), one of the symbols, then press [⏭, ∧] (➡ page 26, step 3).
③ Insert the letter into the space.

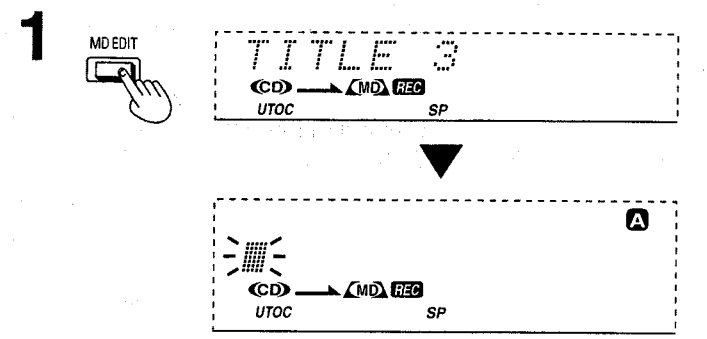
Deleting a letter

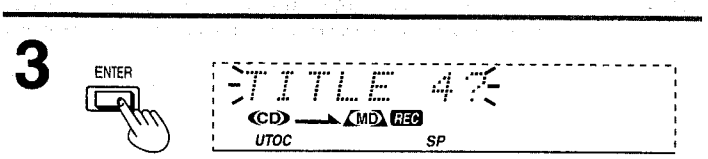
① Move the cursor over the letter to be deleted.
② Select "▮", one of the symbols, then press [⏭, ∧] (➡ page 26, step 3).

Making corrections to a title

① Select the title to be corrected.
Disc title ➡ Steps 1–2 on page 26
Track title ➡ Steps 1–3 in **A** above
② Correct the title using the above editing techniques.
③ Press [ENTER].







Entering track titles during CD recording

You can enter the titles for all the tracks regardless of the track currently recording.

1 **While recording**
Press [MD EDIT].
The titling display for the track recording is shown.

2 **Enter the title.** (➡ page 26, step 3)

3 **Press [ENTER].**
A message appears asking you if you want to title the next track.
If you do, repeat steps 1 to 3.
If you do not want to enter any more titles, press [■]. Recording will continue.
You can also move to the next track without entering a title by pressing [ENTER].

After entering the last track title, "TITLE WRITE" is displayed and the original display is restored.
Titling is complete after the recording is finished and "UTOC Writing" and "UTOC" stop flashing on the display.

To cancel part way through

Press [■] or [CANCEL].
Any titles you have confirmed by pressing [ENTER] remain intact.

To title a track while it is playing

① Press [MD EDIT] to select "TRACK TITLE?" while the track is playing.
② Press [ENTER].
③ Enter the title (➡ page 26, step 3).
④ Press [ENTER].
"TITLE WRITE" is displayed, then the previous display is restored.

Note

- Even if the next track starts playing or recording, that track will not receive the title you are entering.
- If play or recording finishes while you are entering a title, the titling display is cleared. Any titles you have entered, or partially entered, remain intact.
- After you have entered a title during play, "UTOC" lights on the display and you cannot perform other editing operations (DIVIDE, etc.) except for titling until after you stop play and "UTOC Writing" and "UTOC" stop flashing.
- Add other titles and make corrections after recording with the methods described on pages 26 and 27.

Copying the titles from one MD to another (Title station)

You can copy the disc and track titles from one MD to another MD with the same number of tracks.

Preparation: Press [▶/❚❚, MD] to select "MD" as the source and press [■].

1 **Insert the MD with the title.**

2 **While stopped**
Press [MD EDIT] to select "TITLE ST.?".
Each time you press the button:

→TRACK ERASE?→ALL ERASE?→MOVE?→
TITLE ST.?←DISC TITLE?←COMBINE?←

When the disc is write-protected, only "TITLE ST.?" is displayed.

3 **Press [ENTER].**

4 **Press [ENTER].**
"TITLE MEMORY" is displayed when the unit is copying the titles, then "COMPLETE"→"EJECT MD" is displayed.

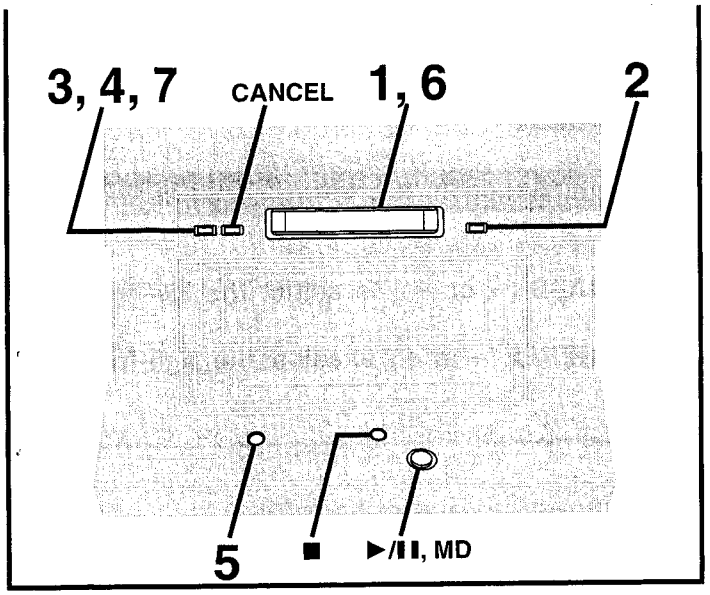
5 **Press [⏏, MD] to eject the MD.**

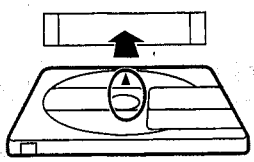
6 **Insert the other MD.**

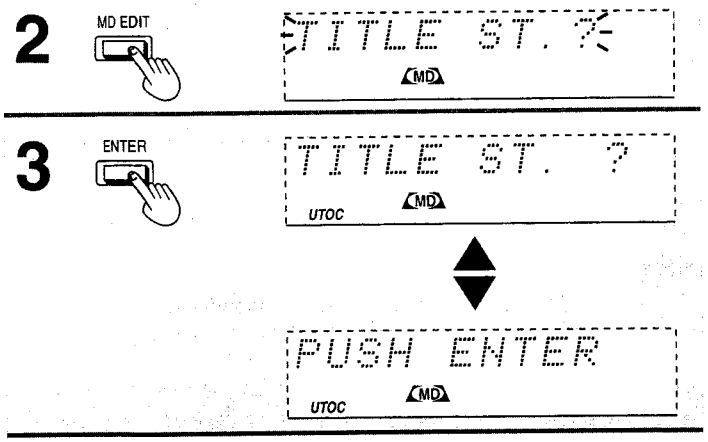
7 **When "Writing OK?" appears on the display**
Press [ENTER] to start copying.
Copying is complete after "UTOC Writing" and "UTOC" stop flashing on the display.

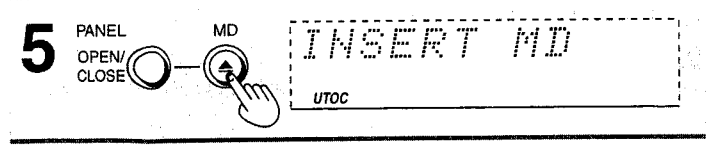
To cancel part way through
Press [■] or [CANCEL].

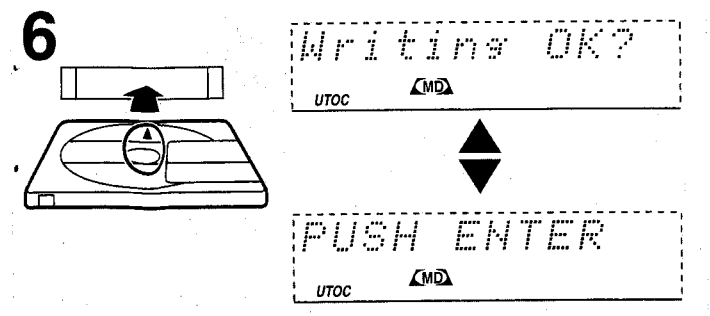
Note
- You cannot copy titles from playback MDs.
- You can only copy titles if both MDs have the same number of tracks.
- The unit can only copy the titles from one MD.
- The title will be lost from the unit's memory if the unit is turned off.
- Any titles already on the other MD will be replaced by this operation.

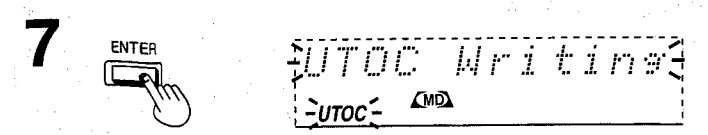






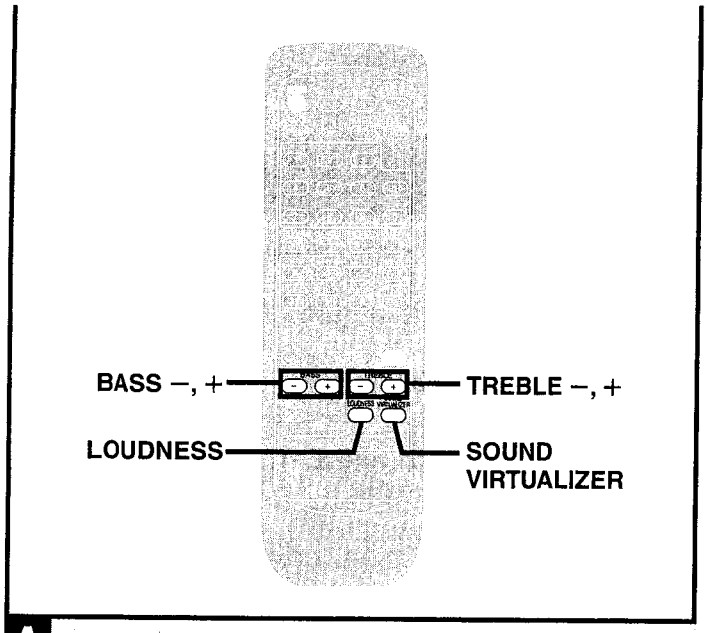






Changing the sound quality

Remote control only

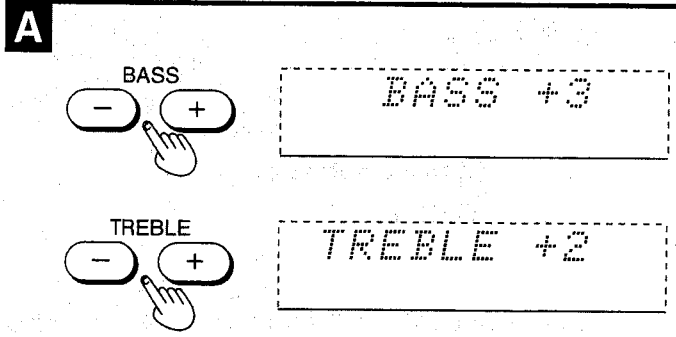


A To adjust the tone

Vary bass and treble levels between −6 and +6.

Press [BASS (− or +)] to adjust the low-frequency range.

Press [TREBLE (− or +)] to adjust the high-frequency range.



Note

- Tone adjustments have no effect on recordings.
- You cannot adjust the tone while loudness is on (➡ below).

For your reference

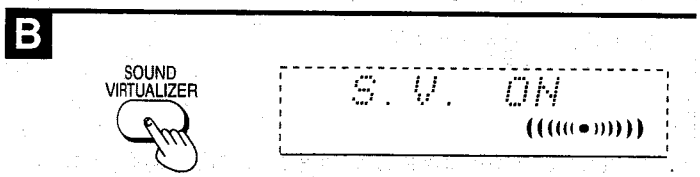
Put your speakers on stands (not included) for clearer low range sounds.

B Using the SOUND VIRTUALIZER

This effect stabilizes the midrange sounds, such as vocals, and gives sound natural width and depth.
Use it when listening to stereo sources.

Press [SOUND VIRTUALIZER].

"S.V. ON" is displayed.



To cancel

Press [SOUND VIRTUALIZER].
"S.V. OFF" is displayed.

Note

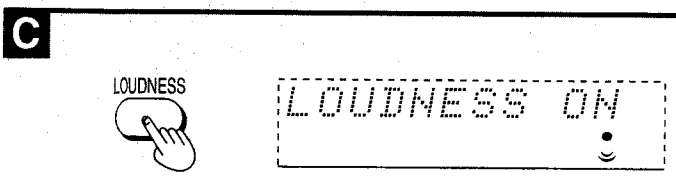
- This effect is less discernable when using headphones.
- Cancel this effect if noise increases when listening to FM.

C Enjoying powerful sound at low volume (LOUDNESS)

Use LOUDNESS to emphasize the treble and bass ranges for more powerful sound when listening at low volume.

Press [LOUDNESS].

"LOUDNESS ON" is displayed.

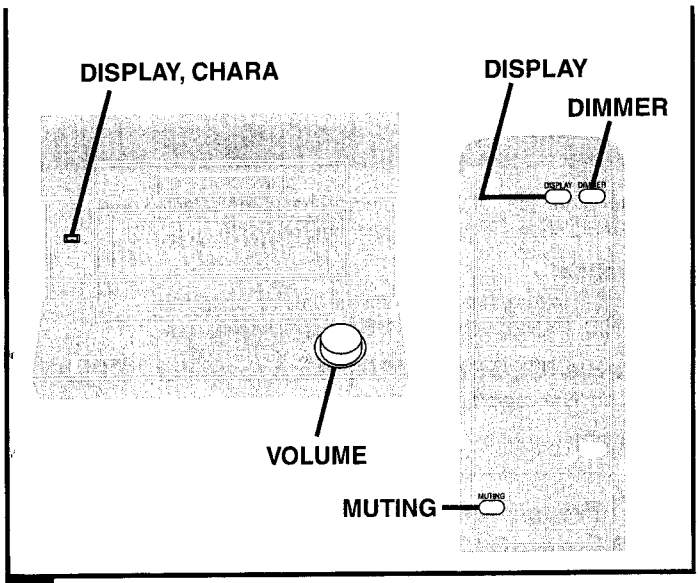


To cancel

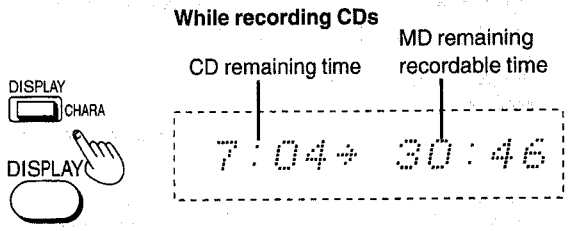
Press [LOUDNESS].
"LOUDNESS OFF" is displayed.

Note

Bass and treble cannot be adjusted manually while LOUDNESS is on.



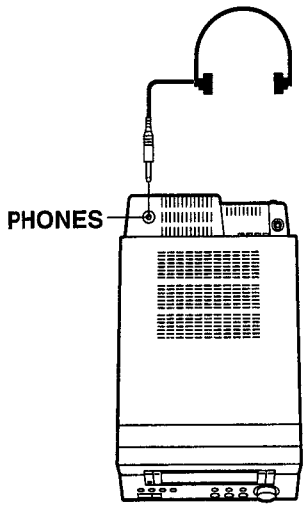
A



B

C

D



Convenient functions

A Switching the display

Press [DISPLAY, CHARA] on the main unit.

OR

Press [DISPLAY] on the remote control.

The display changes each time you press the button.
The information displayed depends on the source.

For example:
While recording CDs
MD track number and elapsed recording time → Remaining CD track time and remaining time for recording on MD
↑—CD track number and elapsed play time←

- If you press this button while a title with 13 or more characters is being displayed, the title will scroll from right to left. The next display is shown if you press the button while a title is scrolling.

B Muting the volume

Remote control only

Press [MUTING].
Volume is reduced to minimum.

To cancel
Press [MUTING] again.
Volume is restored.
To cancel from the unit, turn [VOLUME] to minimum (— dB), then raise it to the required level.
Muting is also canceled when the unit is turned off.

C To dim the display panel

Remote control only

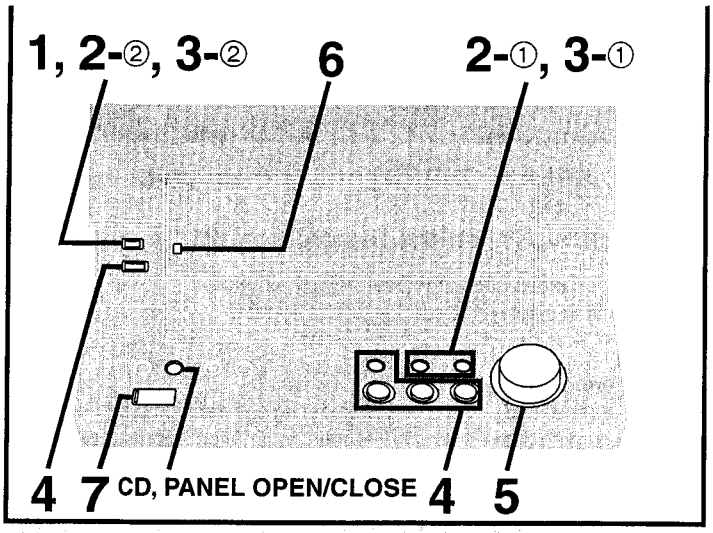
Use this when you are going to sleep or any other time you would prefer the panel to be dimmer.

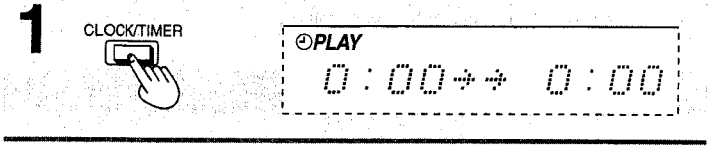
Press [DIMMER].
The display panel dims and other panel indicators, except for the standby/on indicator, go out.

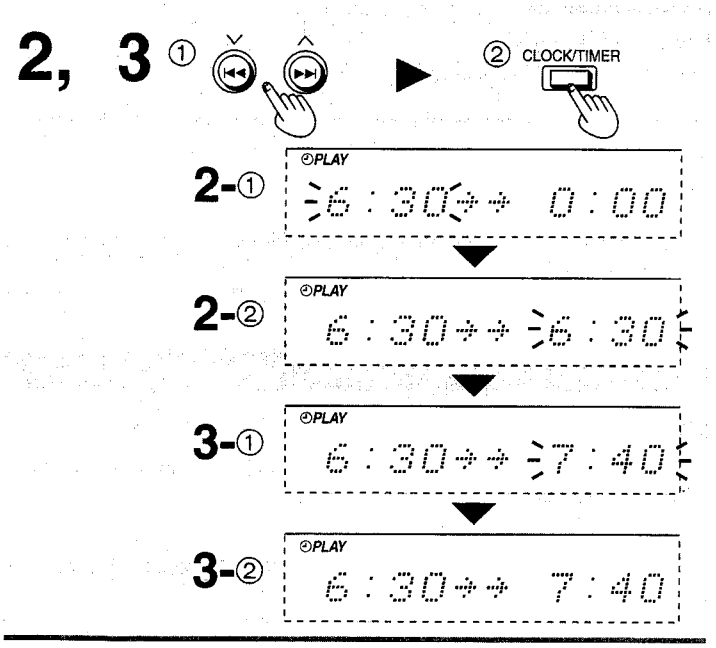
To cancel
Press [DIMMER] again.

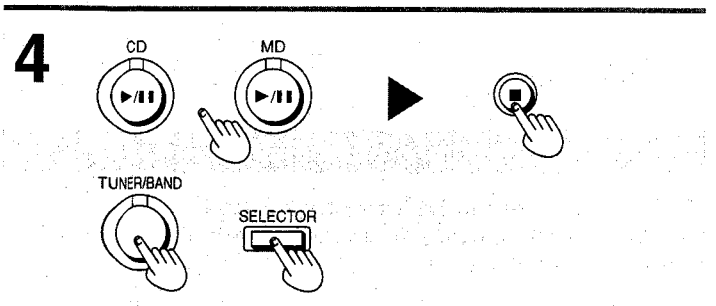
D Using headphones (not included)

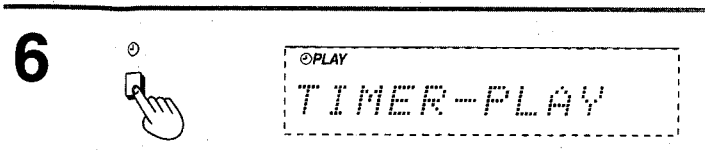
Reduce the volume before connection.
Avoid listening for prolonged periods of time to prevent hearing damage.
Plug type: 3.5 mm stereo











Using the timers

The play timer

This timer starts play of the selected source at the selected time.
The example shows settings for play between 6:30 and 7:40.

Preparation:

- Press [⏻/I] to turn the unit on, set the time (➡ page 10).
- Press [CD, PANEL OPEN/CLOSE]. The CD panel opens.

1 Press [CLOCK/TIMER] twice to select "PLAY".

Each time you press the button:

CLOCK→PLAY→REC→Original display

2 ① Press [|◀◀, ∨] or [▶▶|, ∧] to select ON time.
② Press [CLOCK/TIMER].

3 ① Press [|◀◀, ∨] or [▶▶|, ∧] to select OFF time.
② Press [CLOCK/TIMER].

4 Select the source.

MD, CD

Press [▶/❚❚, MD] or [▶/❚❚, CD] to select "MD" or "CD" and press [■], and insert disc.

The radio

Press [TUNER/BAND] and tune in the desired station.

An external unit

Press [SELECTOR] to select "EXT-IN", "AUX A-IN" or "AUX D-IN".

Each time you press the button:

CD→MD→TUNER→**EXT-IN**
↓
P-MD←**AUX D-IN**←**AUX A-IN**

5 Set the volume for timer play.

6 Press [, PLAY/REC] to select "TIMER-PLAY".

Each time you press the button:

TIMER-PLAY→TIMER-REC→TIMER-OFF

(when the timers are set)

7 Press [⏻/I] to turn the unit off.

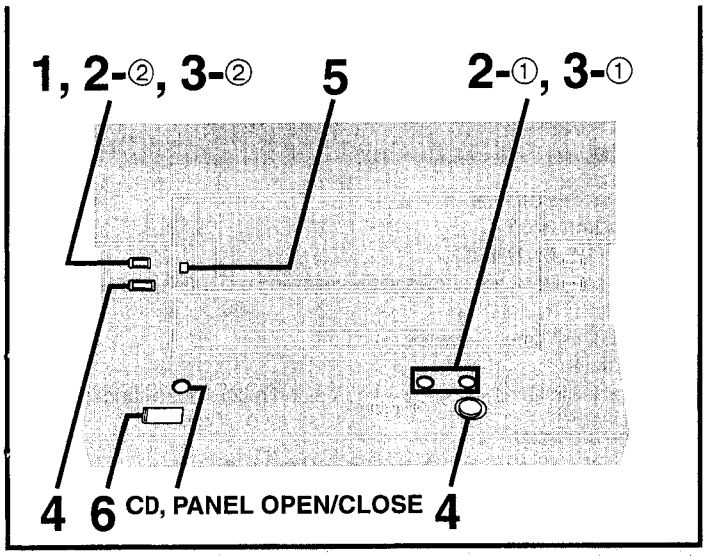
The timer starts in the set condition at the set time.
The volume increases gradually to the set level.

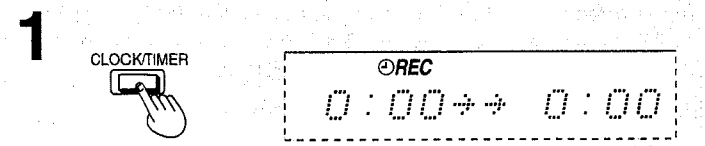
If you set the timer incorrectly

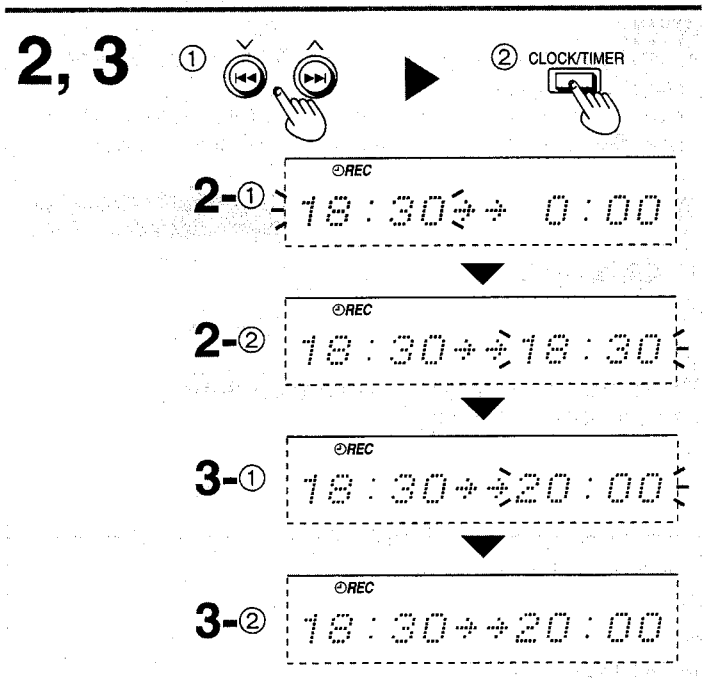
Repeat the procedure from step 1.

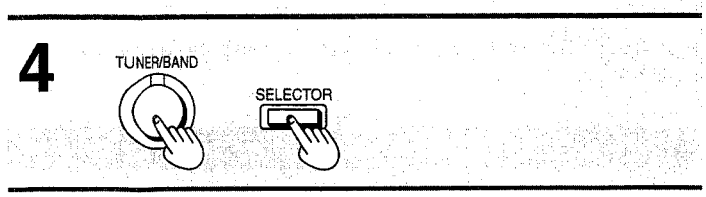
To cancel the timer

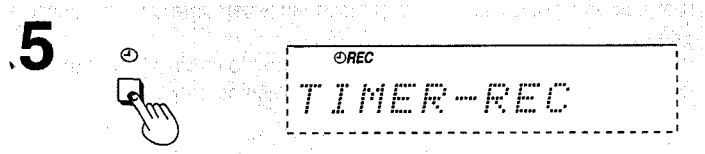
While the unit is on
Press [, PLAY/REC] to select "TIMER-OFF".

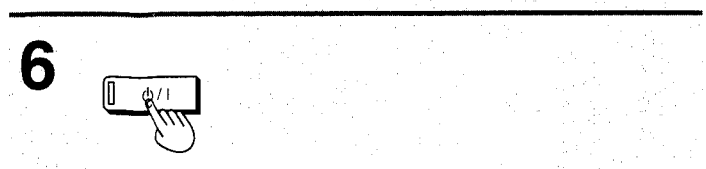












The record timer

This timer records the radio or an external source at the set time.
The example shows settings for recording from 18:30 to 20:00.

Preparation:

- Press [⏻/I] to turn the unit on, set the time (➡ page 10).
- Insert an MD and do the preparatory steps (➡ page 18).
- Press [CD, PANEL OPEN/CLOSE]. The CD panel opens.
- Select the required recording mode (➡ page 22 or 35). The modes you can choose depend on the source you want to record.

1 Press [CLOCK/TIMER] three times to select "⏲REC".

Each time you press the button:

CLOCK→⏲PLAY→⏲REC→Original display

2 ① Press [⏮, ∨] or [⏭, ∧] to select ON time.
② Press [CLOCK/TIMER].

3 ① Press [⏮, ∨] or [⏭, ∧] to select OFF time.
② Press [CLOCK/TIMER].

4 Select the source.

The radio

Press [TUNER/BAND] and tune in the desired station.

An external unit

Press [SELECTOR] to select "EXT-IN", "AUX A-IN" or "AUX D-IN".

Each time you press the button:

CD→MD→TUNER→**EXT-IN**
↑ ↓
P-MD←**AUX D-IN**←**AUX A-IN**

5 Press [⏲, ⏲PLAY/⏲REC] to select "TIMER-REC".

Each time you press the button:

TIMER-PLAY→TIMER-REC→TIMER-OFF

(when the timers are set)

6 Press [⏻/I] to turn the unit off.

Recording starts 30 seconds before the set time with the volume muted during the set time.

If you set the timer incorrectly

Repeat the procedure from step 1.

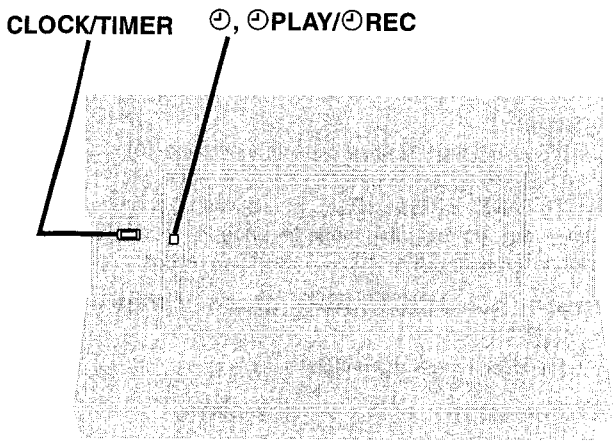
To cancel the timer

While the unit is on
Press [⏲, ⏲PLAY/⏲REC] to select "TIMER-OFF".

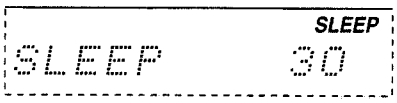
Note

Timer recording starts from the set time even if TURN BACK or TURN/TIME is selected.

A



B



A The play and record timers

Checking the timers

While the unit is off

Press [⏲, ⏲PLAY/⏲REC].

The timer conditions are shown in the following order (when set).

- Play timer:
  start and finish times→source→volume
- Record timer:
  start and finish times→source→source and recording destination

While the unit is on

Press [CLOCK/TIMER] to select "⏲PLAY" or "⏲REC".

Start and finish times are shown.

Turning the timers on and off

The selected timer comes on at the set times if the ⏲PLAY indicator or ⏲REC indicator on the display is on. The indicator can be turned on and off by pressing [⏲, ⏲PLAY/⏲REC] while the unit is on.

Playing the unit after the timers are set

The unit can be used after the timers are set.

Turn the unit off before the set start time.

Note

- High speed CD recording does not work with the record timer. The CD is recorded at normal speed.
- If you select an external source, set the external unit's timer to the same time. (See the instruction manual that came with the external unit.)

B The sleep timer

Remote control only

This function turns the unit off after a set time.

While playing a source

Press [SLEEP] to select the time (minutes).

Each time you press the button:

→SLEEP 30→SLEEP 60→SLEEP 90→
←SLEEP OFF←SLEEP 120←

To cancel the sleep timer

Press [SLEEP] to select "SLEEP OFF".

To confirm the remaining time

Press [SLEEP].

The remaining time is shown for about 5 seconds.

To change the setting

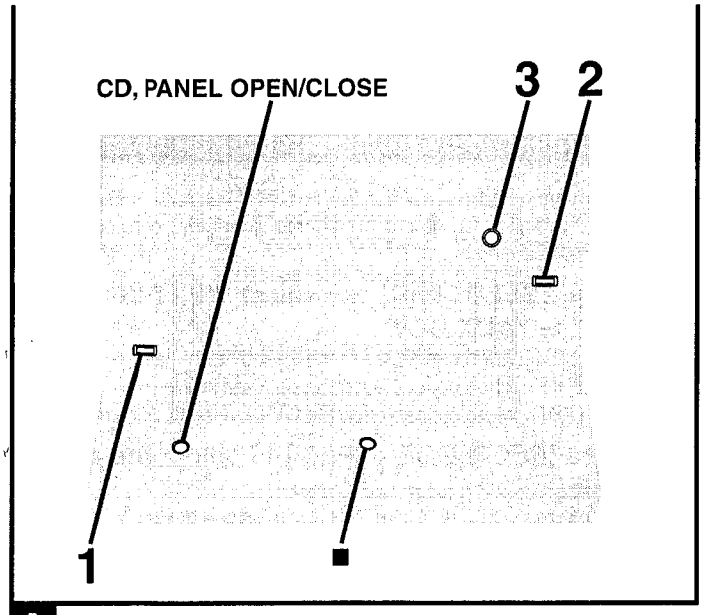
Press [SLEEP] to display the remaining time, then press again to select the required time.

Using the timers together

The play and sleep timer or the record and sleep timer can be used together.

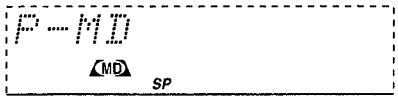
The sleep timer always has priority. Be sure not to overlap timer settings.

The play and record timer cannot be used in combination.

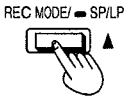


A

1



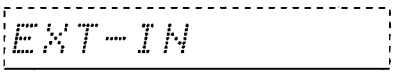
2

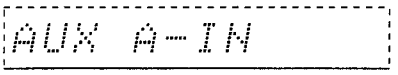


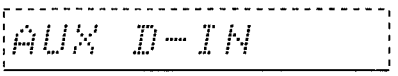
3

B

1







Using other equipment

A Recording from a portable MD player

Make an analog recording from a portable MD player connected to the P-MD terminal.

Preparation:

- Insert the MDs.
- Set the volume on the portable MD player to an appropriate level and turn all sound quality modes off.
- Press [CD, PANEL OPEN/CLOSE]. The CD panel opens.

Note

- Do not place the portable MD player on top of this unit during recording. This can cause noise.
- Adjust the volume on the portable MD player if there is distortion.

1 Press [SELECTOR] to select "P-MD".

Each time you press the button:

CD→MD→TUNER→EXT-IN
↑ ↓
P-MD←AUX D-IN←AUX A-IN

2 Press [REC MODE/–SP/LP] to select the desired mode.

Each time you press the button:
MANUAL⇄SYNCHRO

MANUAL: Normal recording mode
SYNCHRO: Recording starts automatically when the signal from the source reaches a certain level, pauses if a 3-second silence is detected, then starts again when play starts. A track mark is added at the point recording starts.

3 Press [● REC/❚❚].

Recording starts when you have selected MANUAL.

4 Start the portable MD player.

Recording starts when you have selected SYNCHRO.

To stop recording

Press [■].
Recording is complete after "UTOC Writing" and "UTOC" stop flashing on the display.

B Listening to an external source

1 Press [SELECTOR] to select "EXT-IN", "AUX A-IN" or "AUX D-IN".

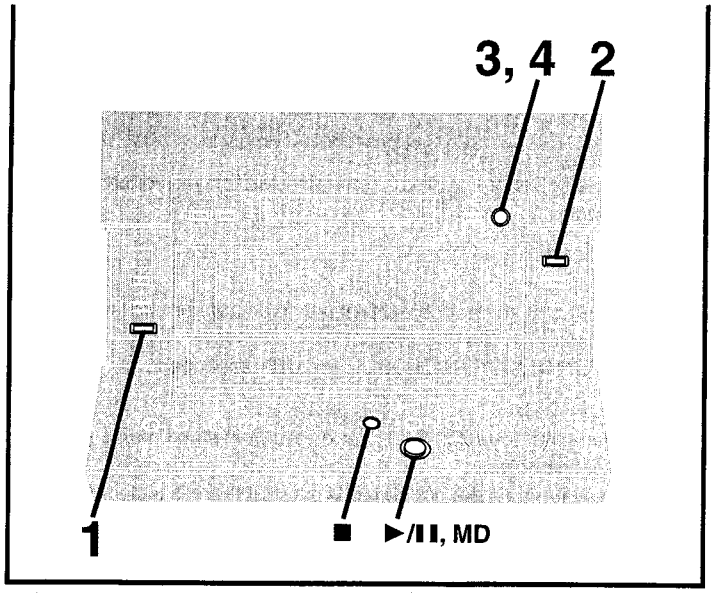
Each time you press the button:

CD→MD→TUNER→**EXT-IN**
↑ ↓
P-MD←**AUX D-IN**←**AUX A-IN**

"EXT-IN": when connected to the EXT-IN terminals
"AUX A-IN": when connected to the AUX terminals
"AUX D-IN": when connected to the OPT DIGITAL IN terminal

2 Operate the unit.

See the unit's operating instructions for details on operation and connection.



Recording an external source

If you have connected the source to the OPT DIGITAL IN terminal, recording will be digital. To record the source in analog, connect it to the EXT-IN or AUX terminals.

1 Press [SELECTOR] to select "EXT-IN", "AUX A-IN" or "AUX D-IN".

"EXT-IN": when connected to the EXT-IN terminals
"AUX A-IN": when connected to the AUX terminals
"AUX D-IN": when connected to the OPT DIGITAL IN terminal

2 Press [REC MODE/–SP/LP] to select the desired mode.

(See pages 22 and 35 for an explanation of the modes.)

3 Press [● REC/❚❚].

Recording starts when you have selected MANUAL.

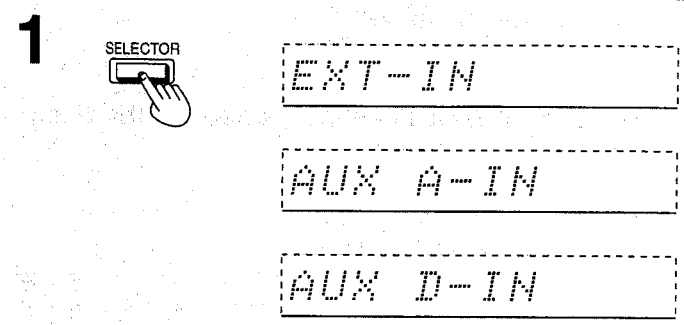
4 If you selected "TURN BACK" or "TURN/TIME" in step 2
When the "TURN BACK" indicator stops flashing and lights
Press [● REC/❚❚] again.

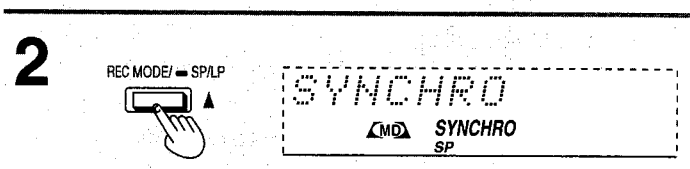
Note

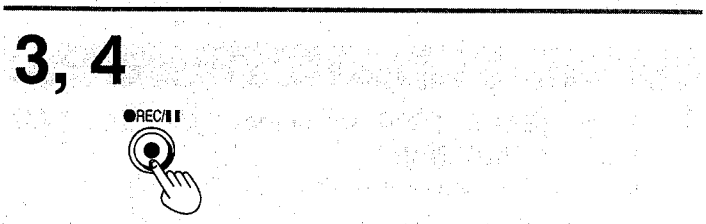
Turn back may not function correctly if recording is started while the indicator is flashing.

5 Start the source to be recorded.

Recording starts when you have selected SYNCHRO.







To stop recording

Press [■].

Recording is complete after "UTOC Writing" and "UTOC" stop flashing on the display.

Note

- Sound is interrupted briefly when recording digitally onto MDs when recording is started and while "UTOC Writing" is flashing. The interruption has no effect on recording.
- Do not use SYNCHRO if the material you are recording contains low levels of sound. Recording may not start correctly or it may stop partway through. Use another recording mode in these cases.

For your reference

This unit has a sampling rate converter so you can record audio from a cable or satellite tuner with a sampling rate of 32 kHz or 48 kHz. Volume may be low when you are playing or recording such sources connected through OPT DIGITAL IN.

Recording from an MD in this unit to a cassette deck

① Press [►/❚❚, MD] to select "MD" as the source then press [■].
② Start recording on the cassette deck.
③ Start playing the MD.

Specifications

■ Amplifier section

RMS power output	
THD 10 %, both channels driven	
LOW	2×16 W (6 Ω)
HIGH	2×4 W (6 Ω)
Total BI-AMP power	2×20 W
Input sensitivity	
AUX	390 mV
EXT IN	390 mV
P-MD	100 mV
Output sensitivity	
EXT OUT	390 mV
Input/output impedance	
AUX	33 kΩ
EXT IN	33 kΩ
P-MD	10 kΩ
Headphone	16–32 Ω

■ FM tuner section

Frequency range	87.50–108.00 MHz (0.05 MHz steps)
Sensitivity	1.8 μV (IHF)
S/N 26 dB	1.5 μV
Antenna terminals	75 Ω unbalanced

■ AM tuner section

Frequency range	522–1629 kHz (9 kHz steps)
Sensitivity	
S/N 20 dB	500 μV/m

■ MD section

System	MiniDisc Digital Audio System
Recording	Magnetic field modulation direct overwrite
Reading	Non-contact optical system with semiconductor laser (λ=780 nm)
Sampling frequency	44.1 kHz
Coding system	ATRAC
Number of channels	2 channels stereo
Wow and flutter	Below measurable limit

■ CD section

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source	Semiconductor laser
Wave length	780 nm
Number of channels	2 channels stereo
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

■ Speakers (SB-PM65)

Type	3 way speaker system
Superwoofer	12 cm cone type
Woofer	10 cm cone type
Tweeter	6 cm ring shaped dome type
Impedance	
LOW	6 Ω
HIGH	6 Ω
Input power	
LOW	35 W (Music)
HIGH	10 W (Music)
Sound pressure level	86 dB/W (1.0 m)
Cross over frequency	110 Hz, 3 kHz
Frequency range	45 Hz–40 kHz (−16 dB) 60 Hz–36 kHz (−10 dB)
Dimensions (W×H×D)	147×283×286 mm
Mass	3.8 kg

■ General

Power supply	AC 230–240 V, 50 Hz
Power consumption	60 W
Standby	
ECO	0.8 W
NORMAL	8.5 W
Dimensions (W×H×D)	
Panels closed	210×140×365 mm
Panels open	210×159×399 mm
Mass	4.7 kg

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

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Displays

ADJUST CLOCK	The clock has not been set.
ADJUST TIMER	Set the ON and OFF time of the timer.
CAN'T COMBINE	System limitations prevent combining some tracks.
CAN'T DIVIDE	System limitations prevent dividing some tracks.
CAN'T EDIT	This unit cannot edit titles more than 100 characters long.
CAN'T MEMORIZE	A title wasn't memorized during title station. Repeat the operation.
CHANGE TIME	The timer's ON and OFF times are same. Reset the times.
DISC ERROR	There is a problem with the disc and you need to replace it.
DISC FULL	There is no space on the disc. Erase some tracks or record with another disc.
DISC/PROTECTED	Close the write protect hole to enable recording and editing.
EJECT ERROR **LOAD ERROR**	A problem occured while loading or ejecting the disc. After this is displayed the unit automatically switches off. Remove the MD and start again.
EMERGENCY/STOP	A problem occured during recording. Eject the MD, reinsert it and start recording from the beginning again.
ERROR	Incorrect operation was performed. Read the instructions and try again.
MD F26	Turn the unit off then on again and reinsert the MD. Consult a dealer if the display appears again.
MD NO DISC **CD NO DISC**	A disc hasn't been inserted.
PlaybackDISC	This is a playback only disc. You cannot record on it or edit it.
SCMS/CAN'T COPY	You are trying to make a second copy of a digital recording. You cannot record from DVDs, video CDs or CD-ROM.
TAKE OUT MD	An MD is sticking out of the slot while the MD panel is closing. Remove the MD.
TITLE FULL	You have entered the maximum number of letters for the track title.
TITLE OVER	You have entered the maximum number of letters for the disc.
TOC Reading	The unit is reading information on the disc. The unit cannot be operated while this is displayed.
TRACK NUMBER/NOT EQUAL	You cannot use title station to copy titles if the second MD has a different number of tracks.
TRACK/PROTECTED	The track was write-protected on another unit. Check whether you want to erase or edit the track before proceeding.
UNLOCK	Check the digital optical fiber cable connection and try again.
UTOC FULL	This display appears for one of the following reasons. ●The section reserved for text information is full; erase unneeded titles to make room. ●The maximum number of tracks (254) has been reached; erase unneeded tracks.

Maintenance

If the surfaces are dirty

To clean this unit, wipe with a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

Troubleshooting guide

Before requesting service, make the below checks. If you can't fix the system as described below, or if something not listed here occurs, refer to the enclosed directory to locate an Authorized Service Center convenient to you or contact your dealer.

Reference pages are shown as black circled numbers ❺.

Note

The unit may become warm during operation, but this is normal.

Common Problems

No sound.	Turn the volume up. The speaker cords may be shorted. Turn the unit off, check and correct the connections and turn the unit on. ❺
Sounds unfixed, reversed or come from one speaker only.	Check the speaker connections. ❺
Humming heard during play.	An AC mains lead or fluorescent light is near the cables. Keep other appliances and leads away from this unit's cables. If possible in your area, turn the AC mains lead's plug or connector over to reverse the lead's polarity.

MDs

Cannot start play.	There may be condensation inside the unit. Wait for an hour and try again.
Cannot record.	Close the write protect hole. ⓫ Check all connections. ❺, ❻ Replace with a recording MD. ⓫
Cannot enter text.	Reduce the amount of text on the MD. (An MD can hold up to about 1700 characters.) ㉕
The disc isn't pulled automatically into the unit, or it needs to be pushed forcefully to go in.	Turn the unit off then on again. This situation can occur if the MD is stopped when ejecting or if it is forced into the slot.
Cannot high-speed record.	There are limitations on high-speed recording. ㉑
No operation or incorrect display.	The MD may not act correctly because of the recording system. This may cause the following problems. •UTOC FULL is displayed despite there being space on the MD and the maximum number of tracks is yet to be reached. •COMBINE or DIVIDE cannot be used. •Remaining time doesn't increase after erasing a track. •The total time of the tracks and the remaining recording time do not add up to the total possible recording time. This may occur because tracks less than two seconds are counted as two seconds.
After inserting an MD, "TOC Reading" continues to flash and you are unable to operate the unit or eject the MD.	A problem occurred while the unit was reading TOC. 1 Press [⏻/I] and wait a moment until the unit clicks to indicate it is completely off. 2 Press [⏏, MD]. The unit comes on and the MD is ejected. (Repeat steps 1 and 2 if the MD is not ejected.) 3 Insert another MD. If the problem reoccurs, consult your dealer.

CDs

The display is wrong or play won't start.	The disc may be upside down. ⓭ Wipe the disc. Replace the disc if it is scratched, warped, or nonstandard. ⓭ There may be condensation inside the unit. Wait for an hour and try again.
Only one track from the CD is recorded.	Press [CD EDIT] to cancel one track edit recording and to select the required mode (AUTO REC or OFF). ⓳

The radio

Noise is heard. **The stereo indicator flickers or doesn't light.** **Sound is distorted.**	Use an outdoor antenna. ❼
A beat sound is heard.	Turn the TV off or separate it from the unit.
A low hum is heard during AM broadcast.	Separate the antenna from other cables and leads.

Remote control

Remote control doesn't work.	Check the batteries are inserted correctly. ❼ Replace the batteries if they are worn. ❼